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Plant Inventory No. 214

Plant Materials Introduced in 2005
(Nos. 636445 - 641917)

Foreword

Plant Inventory No. 214 is the official listing of plant materials accepted into the U.S. National Plant Germplasm System (NPGS) between January 1 and December 31, 2005 and includes PI 636445 to PI 641917. The NPGS is managed by the U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS). The information on each accession is essentially the information provided with the plant material when it was obtained by the NPGS. The information on an accession in the NPGS database may change as additional knowledge is obtained.

The Germplasm Resources Information Network (http://www.ars-grin.gov/npgs/index.html) is the database for the NPGS and should be consulted for the current accession and evaluation information and to request germplasm.

While the USDA/ARS attempts to maintain accurate information on all NPGS accessions, it is not responsible for the quality of the information it has been provided.

For questions about this volume, contact the USDA/ARS/National Germplasm Resources Laboratory/Database Management Unit: dbmu@ars-grin.gov

The following were collected by Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Edward J. Garvey, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 409, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States; Lufter Xhuveli, Agricultural University of Tirana, Dept. of Agronomy, Rr."Myslym Shyri", Tirana, Albania. Received 09/1996.

PI 636445. Trifolium angustifolium L.
Wild. Al 102; S-90-145; W6 18651. Collected 08/29/1996 in Albania. Latitude 40° 57' 55" N. Longitude 20° 30' 43" E. Elevation 570 m. Berzesht Mountains. Height 30-50cm, mature, erect. Leaflets long, slender, 6-8cm long, 0.5-1.0cm wide. Stems not grooved. Infrequent.

The following were collected by Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Nicolay Portinier, Kamorov Institute of Botany, St. Petersburg, Leningrad, Russian Federation; Nicolay Khitrov, Dokvchaev Soil Institute, Pygevsky, per., 7., Moscow, Moscow 109017, Russian Federation. Received 01/1996.

PI 636446. Trifolium apertum Bobrov
Wild. 0220; W6 18351. Collected 08/05/1995 in Russian Federation. Latitude 44° 25' 54" N. Longitude 40° 13' 53" E. Elevation 518 m. Province Maykop, south of Maykop, 1 km north of Abadzekhskaya. Past logged, now grazed, mowed hay. Slope 0-5%, aspect S. Light open. Soil Alluvial sediments, clay, upper layer pH 5.9. Seasonally dry, upper slope, terrace, plowed some years ago. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Hornbeam-Oak. Dominant shrub species Carpinus sp., Q. petraea. Dominant herb/grass species legumes, Festuca pratensis. Population distribution patchy, abundance occasional. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 636447. Trifolium aureum Pollich
Wild. 0127; W6 18483. Collected 09/07/1995 in Karelia, Russian Federation. Latitude 43° 28' 28" N. Longitude 41° 40' 54" E. Elevation 1800 m. Province Teberda, Karachayevo-Cherkesskaya Republic, 8 km west of Teberda. Past logged, now grazed. Slope 41-60%, aspect S. Light 3/4 shade to shaded. Soil loam, granitic derived. Seasonally dry, lower to mid slope. Vegetation closed, evergreen open forest with closed lower layers. Surrounding vegetation same. Dominant tree species Pinus syl., hamata on south slope, Abies n., Picea o. on north slope. Dominant shrub species Juniperus oblonga, Rosa sp., Ribes sp. Dominant herb/grass species Achillea sp., Trifolium sp., Coronilla sp., Lotus c., Deschampsia c., Festuca sp., Agrostis sp., Calamagrostis sp. Population distribution patchy, abundance occasional. Growth habit erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 636448. Trifolium aureum Pollich
Wild. A77; W6 18589. Collected 08/03/1995 in Russian Federation. Latitude 44° 22' 15" N. Longitude 40° 22' 52" E. Elevation 549 m. Southeast of Maykop, 2 km. southeast of Novosvobodnaya. Past logged, now grazed. Slope 0-5 to 6-10%, aspect SW.Light open.Soil clay, pH 3.8-4.5.Moist to seasonally dry, upper slope.Vegetation closed, evergreen broad-leafed herb veg.Surrounding veg. open deciduous forest with closed lower layers. Dominant shrub species Carpinus sp., Q. petraea. Dominant herb/grass species legume, Trifolium, Lotus, Festuca pratensis. Population distribution patchy, abundance occasional. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

The following were collected by Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Edward J. Garvey, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 409, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States; Lufter Xhuveli, Agricultural University of Tirana, Dept. of Agronomy, Rr."Myslym Shyri", Tirana, Albania. Received 09/1996.

PI 636449. Trifolium campestre Schreb.
Wild. Al 038; S-90-136; W6 18624. Collected 08/25/1996 in Albania. Latitude 40° 11' 50" N. Longitude 19° 35' 33" E. Elevation 1110 m. Qafe Llogora, the Pass of Logora National Park. Growing only close to bushes. Area heavily grazed.

The following were donated by J. Valkoun, Int. Center for Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria. Received 02/10/2002.

PI 636450. Trifolium campestre Schreb.
Wild. IG 126977; 4795; W6 23747. Collected 02/10/2002 in Armenia. Latitude 39° 11' 15" N. Longitude 46° 25' 29" E. Elevation 970 m. Sjunik province.

The following were collected by Gary A. Pederson, USDA, ARS, Waste Management and Forage, Research Unit, Mississippi State, Mississippi 39762-5367, United States; Kenneth H. Quesenberry, University of Florida, Department of Agronomy, Forage Breeding and Genetics, Gainesville, Florida 32611-0500, United States. Received 11/29/1993.

PI 636451. Trifolium haussknechtii Boiss.
Cultivated. 93-100; G 31176. Collected 08/10/1993 in Sofia, Bulgaria. Latitude 42° 31' N. Longitude 23° 31' E. Elevation 900 m. 2-3 km south of Pasarel on road to Sophia, Sofia, Bulgaria. Woodland and fields, low mountains, rolling hills, Ph 6.25, 56% sand, 37% silt, 7% clay, sandy loam. Frequency of sample: Rarely seen Comments: Four plants growing in cultivated field with weeds.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, USDA, ARS, Washington State

University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 07/28/1996.

PI 636452. Trifolium incarnatum L.
Wild. B96-180; W6 19366. Collected 07/1996 in Bulgaria. Latitude 41° 41' 52" N. Longitude 24° 41' 28" E. Elevation 1216 m. 1km south of Chepalari, on steep slope. west.

PI 636453. Trifolium incarnatum L.
Wild. B96-331; W6 19472. Collected 07/1996 in Bulgaria. Latitude 42° 52' 14" N. Longitude 23° 59' 44" E. Elevation 441 m. Open meadow, grass, clovers (many species). Legumes dry. south of city, Pravec. Open. flowers= white/rose.

The following were donated by J. Valkoun, Int. Center for Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria. Received 02/10/2002.

PI 636454. Trifolium striatum L.
Wild. IG 126998; 4796; W6 23748. Collected 02/10/2002 in Armenia. Latitude 39° 5' 12" N. Longitude 46° 29' 3" E. Elevation 980 m. Sjunik province.

The following were developed by Seminis Vegetable Seeds, Inc., Woodland, California, United States. Received 12/23/2004.

PI 636455 PVPO. Lactuca sativa L.
Cultivar. "Red Bull"; PS06515636. PVP 200500042.

PI 636456 PVPO. Lactuca sativa L.
Cultivar. "Valley Heart"; PS 06511508. PVP 200500041.

The following were developed by Holden's Foundation Seeds, Inc., United States. Received 12/23/2004.

PI 636457 PVPO. Zea mays L.
Breeding. LH360. PVP 200500027.

The following were developed by Northwest Plant Breeding. Received 12/23/2004.

PI 636458 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "Clear First". PVP 200400053. Pedigree - mutagenized 'Madsen'.

PI 636459 PVPO. Triticum aestivum subsp. compactum (Host) Mackey
Cultivar. Pureline. "MEL"; CDH01. PVP 200400052. Pedigree - EMS induced mutation in Coda.

The following were developed by Vincent R. Pantalone, University of Tennessee, Department of Plant Sciences, 2431 Joe Johnson Drive, Knoxville, Tennessee 37996, United States; Dilip Panthee, University of Tennessee, Dept. of Plant Sci., 252 Ellington Plant Sci., 2431 Joe Johnson Drive, Knoxville,

Tennessee 37996, United States. Donated by Vincent R. Pantalone, University of Tennessee, Department of Plant Sciences, 2431 Joe Johnson Drive, Knoxville, Tennessee 37996, United States. Received 01/18/2005.

PI 636460. Glycine max (L.) Merr.
Breeding. Pureline. TN03-350; SY 502001. GP-322. Pedigree - TN03-350 is an F6-derived line from the cross N87-984-16 X TN93-99. Line TN03-350 was released as a germplasm because of its high yield potential in TN and increased protein concentration throughout broad geographical regions of southern USA. TN03-350 was the highest protein containing line (439 g kg-1) out of 48 entries included in the 2003 MG V USDA Southern Regional Uniform Preliminary Test in 11 locations. It has an average level (197 g kg-1 seed) of oil content. The seed yield of TN03-350 at 3655 kg ha-1 was significantly higher than that of the commercial check cultivar 5601T at 3347 kg ha-1 and 5002T at 3272 kg hg-1 averaged over a total of six testing environments in Tennessee. TN03-350 has white flower color, gray pubescence, tan pod wall, and a determinate growth habit. TN03-350 is resistant to stem canker [caused by Diaporthe phaseolorum var. caulivora. TN03-350 matures about four days later than 5601T, thus its relative maturity is approximately 6.0. Seeds are yellow with smooth seed coats and buff hila. The seed size is approximately 15 g 100 seeds-1 with excellent seed quality.

PI 636461. Glycine max (L.) Merr.
Breeding. Pureline. TN04-5321; SY 502002. GP-323. Pedigree - TN04-5321 is an F6-derived line from the cross N87-984-16 X TN93-99. Average protein concentration of TN04-5321 (431 g kg-1 seed) was significantly higher than that of the checks 5601T (405 g kg-1 seed) and 5002T (392 g kg-1 seed) as well as the parents N87-984-16 (427 g kg-1 seed) and TN93-99 (390 g kg-1 seed). The seed yield of TN04-5321 at 3222 kg ha-1 was not significantly different than that of the commercial check cultivars 5601T at 3347 kg ha-1 and 5002T at 3272 kg ha-1, averaged over a total of six testing environments in Tennessee. TN04-5321 has white flower color, gray pubescence, tan pod wall, and a determinate growth habit. TN04-5321 is similar to commercial checks for loding. TN04-5321 matures about three days later than 5601T, thus its relative maturity is approximately 5.9. The seeds are yellow with smooth seed coats and buff hila. The seed size is large, exceeding 16 g 100 seeds-1 with excellent seed quality.

The following were donated by Vincent R. Pantalone, University of Tennessee, Department of Plant Sciences, 2431 Joe Johnson Drive, Knoxville, Tennessee 37996, United States. Received 01/18/2005.

PI 636462. Glycine max (L.) Merr.
Breeding. Pureline. TN04-5363; SY 502003. Pedigree - TN04-5363 is an F6-derived line from the cross N87-984-16 X TN93-99. Average total sulfur containing amino acid concentration (33 g kg-1 protein) in TN04-5363 is very close to the World Health Organization standard for animal feed of 35 g kg-1 protein, which is based on egg protein. TN04-5363 has a normal level of seed protein (399 g kg-1) and oil (208 g kg-1) content. The seed yield of TN04-5363 at 3231 kg ha-1 was not significantly different from that of the commercial check cultivars 5601T at 3347 kg ha-1 and 5002T at 3272 kg ha-1 averaged over a total of six testing environments in Tennessee. TN04-5363 matures 4 days earlier than 5601T and 2 days earlier than 5002T, thus its relative maturity is

4.9. Interestingly, despite the negative correlation between maturity and seed yield exhibited in the population from which this line was derived, TN04-5363 has maintained high yield with earlier maturity. TN04-5363 may be useful as a parent to improve total sulfur containing amino acid, seed yield and provide maturity that is well adapted to the Mid-South region. Tn04-5363 has purple flower color, gray pubescence, tan pod wall,and a determinate growth habit. TN04-5463 is similar to commercial checks for lodging. The seeds are yellow in color with smooth seed coats and buff hila. The seed size is large, approximately 16 g 100 seeds-1 with excellent quality.

The following were developed by Jeff Tyler, Delta and Pine Land Company, P.O. Box 157, 100 Main Street, Scott, Mississippi 38772, United States; Robert L. Paris, USDA-ARS, P. O. Box 345, 141 Experiment Station Road, Stoneville, Mississippi 38776, United States. Received 12/07/2004.

PI 636463. Glycine max (L.) Merr.
Cultivar. Pureline. "Freedom". CV-476. Pedigree - Hutcheson x Pioneer 9641. In Mississippi trials, Freedom has averaged 20 cm taller in height and one day later in maturity than Hutcheson. In Uniform Soybean Tests, Southern States, three year average, seed protein and oil were 42.2 and 19.8 percent respectively for Freedom, versus 40.9 and 20.6 percent for Hutcheson. Freedom has white flowers, gray pubescence, tan pods at maturity, and dull yellow seeds with buff hila, and has field tolerance to race 10 of phytophthora rot and is resistant to stem canker.

The following were developed by Randy Shoemaker, USDA-ARS, Iowa State University, Field Crop Research, Ames, Iowa 50011, United States; Walter R. Fehr, Iowa State University, Office of Biotechnology, 1210 Molecular Biology Building, Ames, Iowa 50011, United States; Brian W. Diers, University of Illinois, Department of Crop Sciences, 1102 S. Goodwin Ave., Urbana, Illinois 61801, United States; Dechun Wang, Michigan State University, Department of Crop and Soil Sciences, A384-E Plant and Soil Science Building, East Lansing, Michigan 48824-1325, United States; Eileen A. Kabelka, University of Florida/ IFAS, Horticultural Sciences Department, 1301 Fifield Hall, Hull Road, Gainesville, Florida 32611-0690, United States; Prakash R. Arelli, USDA-ARS, 605 Airways Blvd., Jackson, Tennessee 38301, United States; S.R. Carlson, University of Illinois, Dep. of Crop Sciences, Urbana, Illinois 61801, United States. Received 12/09/2004.

PI 636464. Glycine max (L.) Merr.
Breeding. Pureline. LDX01-1-65. GP-310. Pedigree - LDX01-1-65 is a selection developed through four backcrosses using (PI) 468916 as the donor parent (G. soja) and the Iowa State experimental line A81-356022 as the recurrent parent. LDX01-1-65 is homozygous for two soybean cyst nematode (SCN) resistant quantitative trait loci that were backcrossed into it from the Glycine soja (PI 468916) donor. The agronomic appearance of LDX01-1-65 is similar to A81-356022, the recurrent parent. It is indeterminate with purple flowers, tawny pubescence, brown pod color at maturity, and yellow seeds with black hila. LDX01-1-65 had 195 kg/ha greater seed yield, 1.1 unit greater lodging (on a 1 to 5 scale), was 1 cm taller, and three days later in maturity than A81-356022 across five environments over two years testing. There was moderate SCN pressure in the field locations during these trials, with environments averaging from 86 to 4280 eggs/100 ml of soil at the end of the season.

When inoculated with the SCN isolate PA3, greenhouse tested female index values for LDX01-1-65 were 14, compared to 3 for PI 88788, 2 for the Dwight, and 95 for A81-356022. LDX01-1-65 also was inoculated and greenhouse tested with PA2, a HG type 1.2.5.7 SCN isolate (Race 2), and PA5, a HG type 2.5.7 SCN isolate (Race 5). In the PA2 test, LDX01-1-65 had a female index of 57, compared to PI 88788 with 23. In the PA5 test, LDX01-1-65 had a female index of 3, compared with 53 for PI 88788.

The following were developed by Anna Myers McClung, USDA, ARS, Rice Research Unit, 1509 Aggie Drive, Beaumont, Texas 77713, United States. Received 11/24/2004.

PI 636465. *Oryza sativa* L.
Cultivar. Pureline. "PRESIDIO"; TX9092; RU9903092. Pedigree - Jefferson sib//Maybelle/Rosemont. Semidwarf long grain variety that averages 94 cm in height. A very early maturing cultivar when grown in the southern United States. It flowers in 79 days, has excellent main crop yield and superior ratoon crop potential. Milling yield is very high, averaging 62 percent head rice: 70 percent total milled rice. The plant is glaborous and the lemma, palea, and apiculus are straw colored at maturity. It is moderately tolerant to sheath blight disease, has moderate resistant to blast disease, and microsatellite markers indicate that it possesses the Pi-z gene for blast resistance. It has conventional long grain cooking quality as indicated by intermediate amylose content of 22% and an intermediate alkali spreading value of 4 (1.7% KOH).

PI 636466. *Oryza sativa* L.
Cultivar. Pureline. "SABINE"; RU0103123. Pedigree - Cypress (irradiated)/Dixiebelle. A semidwarf plant type averaging 93 cm in height, and is early maturing, averaging 81 days to heading. The plant is glaborous and at maturity the spikelet is straw colored and awnless. Is a long grain cultivar with higher yield potential than its parent Dixiebelle. Molecular marker data and race reaction data indicate that Sabine possesses the Pi-i major gene for blast resistance. Has high amylose content (25%) associated with the presence of the CT11 (105 nt) allele of the Waxy gene located at the RM190 microsatellite marker on chromosome 6. Has an intermediate gelatinization temperature as indicated by an alkali spreading value of 4 at 1.7% KOH.

PI 636467. *Oryza sativa* L.
Cultivar. Pureline. "LAVACA"; RU9503163. Pedigree - Dellmont/(B8462T3-710) Basmati 370//CI9881/PI331581. Semidwarf long grain cultivar, averages 93 cm in height. Considered an early maturing cultivar when grown in the southern United States, flowering in 88 days. Believed to be resistant to only race IH-1 of blast disease fungus. Has conventional long grain cooking quality as indicated by intermediate amylose content of 22% and an intermediate alkali spreading value of 4 (1.7% KOH). The grain quality is not aromatic and the grains elongate dramatically when cooked.

The following were developed by Charles Tischler, USDA-ARS, Grassland, Soil, and Water Research Lab., 808 E. Blackland Rd., Temple, Texas 76502, United States; Byron L. Burson, USDA, ARS, Texas A&M University, Department of Soil and Crop Science, College Station, Texas 77843-2474, United States. Received 11/26/2004.

PI 636468. Panicum virgatum L.
Breeding. Population. TEM-LoDorm. GP-98. Pedigree - Derived from Alamo switchgrass through four cycles of selection, the first three cycles utilizing mass selection for germination of freshly-harvested seed, and the last cycle progeny testing was utilized to identify 24 clones (out of 150) with the greatest germination of freshly-harvested seed. Derived from Alamo, a lowland switchgrass cultivar. The selection protocol involved four cycles of selection, the first three of these being mass selection for low dormancy with respect to seed germination. In the last cycle, the 24 clones whose seed exhibited highest germination were selected and replanted. Seed was harvested from these outstanding plants and germination percentages were determined over several years. Relative rankings of the clones varied from year to year, but the mean germination of seed of the clones was always significantly greater than that of unselected Alamo. Equal portions of seed of each of the genotypes were combined and constitutes the TEM-LoDorm germplasm. The appearance of these clones in the field was no different than unselected Alamo, and the germplasm should be no different than Alamo in any characteristics except germination behavior.

The following were developed by Robert K. Bacon, University of Arkansas, Dept. of Crop, Soil, and Env. Science, 115 Plant Science Bldg., Fayetteville, Arkansas 72701, United States. Received 12/02/2004.

PI 636469. Avena sativa L.
Cultivar. Pureline. "AR258-7"; ARO258-7. Pedigree - AR102-5A//NC81-333/PA8017-26. Has good winterhardiness and good straw strength, and is short (21 cm shorter than the cultivar Harrison) with a relatively compact panicle. It is moderately resistant to oat stem rust and moderately susceptible to crown rust. It heads approximately 2 days later than the cultivar Harrison and has tan seeds with a high bushel weight (approximately 34 lb/bu). Besides having high grain yield potential it is also excellent for use as forage.

The following were developed by Eugene A. Milus, University of Arkansas, Dept. of Plant Pathology, Fayetteville, Arkansas 72701, United States; Robert K. Bacon, University of Arkansas, Dept. of Crop, Soil, and Env. Science, 115 Plant Science Bldg., Fayetteville, Arkansas 72701, United States; John T. Kelly, University of Arkansas, Department of Crop, Soil & Environmental Sciences, 115 Plant Science, Fayetteville, Arkansas 72701, United States; C.E. Parsons, University of Arkansas, Dept. of Crop, Soil and Environmental Sciences, Lonoke, Arkansas 72086, United States. Received 12/02/2004.

PI 636470. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "AR910"; AR910-9-1. CV-981. Pedigree - AR369-4-2/Bayles = Rosen/FL737//Bayles. Released 2004. Awnless, white-chaffed wheat which is similar in height to Pat but heads approximately 6 days earlier. It has good winter hardiness and good straw strength. The heads are lax and the seeds are red, averaging 34 g/1000 seed. Has resistance to leaf rust and stripe rust, is moderately resistant to Wheat soilborne mosaic virus (SBWMV), moderately susceptible to Septoria leaf blotch, and susceptible to Wheat spindle streak mosaic virus (WSSMV). It has excellent soft wheat milling and baking characteristics.

PI 636471. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. AR93005; AR93005-6-1. GP-801. Pedigree - Wakefield/KS91WGRC11. Released 2004. Soft red winter wheat line with a novel gene for leaf rust resistance. Seedling tests indicated had a low infection type when inoculated with races CDBD, FMML, LBBK, MCRR, NBGT, MBDS, TNGJ, and TNRS. Greenhouse tests with the parental lines and races PNMT, TLGM, and TLRT indicate it has the same infection type as its parent, KS91WGRC-11, and therefore is likely to have the same resistance gene (derived from Triticum tauschii accession TA 2450). The resistance in AR93005 has shown to be effective under field trials. Field screening data for common diseases indicate resistance to leaf rust under inoculated field conditions.

The following were developed by William D. Branch, University of Georgia, Coastal Plain Experiment Station, Department of Crop and Soil Sciences, Tifton, Georgia 31793-0748, United States. Received 12/13/2004.

PI 636472. Arachis hypogaea L.
Cultivar. Pureline. "Georgia-04S"; GA 982502. CV-80; PVP 200500121. Pedigree - (Georgia Browne x UF 435-OL-2) X Georgia Browne. Significantly lower in Tomato Spotted Wilt Virus than Pronto, Spanco, and Olin; >25% higher yield, >5% total sound mature kernel grade; >25% dollar value return per hectare when compared to Tampspan 90, Pronto, Spanco and Olin. Unique fromanish-type cultivars in having combination of high-oleic and low-linoleic fatty acid ratio, more decumbent spreading growth habit, darker green foliage, and medium maturity. Significantly higher O/L ratios than Georgia Browne, 33:1 vs. 2:1 respectively.

The following were developed by Don R. Viands, Cornell University, Department of Plant Breeding, 523 Bradfield Hall, Ithaca, New York 14853, United States; R.P. Murphy, Cornell University, Dept. of Plant Breeding and Biometry, Ithaca, New York 14853, United States; J.L. Hansen, Cornell University, Dept. of Plant Breeding and Biometry, Ithaca, New York 14853-1902, United States; A.A.G. Westra, Cornell University, Dept. of Plant Breeding and Genetics, Ithaca, New York 14853, United States. Received 12/07/2004.

PI 636473. Bromus inermis Leyss. **subsp. inermis**
Cultivar. Population. "York"; NY86-B. CV-23. Pedigree - Is a synthetic of eight clones. Three clones are from Saratoga, four are from Rebound, and one is an original clone of Saratoga (46-19). A southern type smooth bromegrass, is rhizomatous, and is adapted to the Northern and North-Central USA. Characterized by strong seedling vigor, early spring growth, rapid recovery from cutting and high aftermath production. Consistently taller than average, and was significantly taller than Saratoga, and early as well. At one location in Wisconsin, had superior brown leafspot resistance, and was significantly more resistant than Saratoga. After three production years of yield data from five trials, it averaged 0.36 tons of forage at 12% moisture per acre per year more than Saratoga. In these grass-alfalfa mixture trials, it averaged 0.17 tons of forage at 12% moisture per acre per year more than Saratoga. Matures about two days earlier than Saratoga in New York.

The following were developed by Thomas C. Kilen, USDA, ARS, Soybean Production Research, P.O. Box 196, Stoneville, Mississippi 38776, United States; Pat Donald, USDA-ARS, 605 Airways Blvd, Jackson, Tennessee 38301, United States; Alemu Mengistu, USDA/ARS, West Tennessee Experiment Station, 605 Airways Blvd., Jackson, Tennessee 38301, United States. Received 12/13/2004.

PI 636474. Glycine max (L.) Merr.
Breeding. Pureline. D99-2018. GP-327. Pedigree - Bedford and Altona cross, containing an allele of gene Rps 6 which confers resistance to phytophthora rot from Altona, and resistance to soybean cyst nematode from the recurrent parent Bedford. This line will be useful to the research community because it will expand the set of previous releases of phytophthora rot-resistant lines which are near-isogenic to the cultivar Bedford. It has a unique gene-allele combination in the same genetic background (Bedford) which makes it very useful as diagnostic tools and as parents in breeding. It contains an allele of gene Rps 6 which confers resistance to phytophthora rot from Altona. It is has resistance to soybean cyst nematode, from Bedford. It is the seventh in a group of germplasm lines containing different Rps alleles in a Bedford background.

The following were developed by Zahoor Ahmad, National Agricultural Research Centre, Pakistan Agricultural Research Council, Plant Genetic Resources Institute, Islamabad, Pakistan; Rashid Anwar, Pakistan Agricultural Research Council, National Agricultural Research Center, Plant Genetic Resources Center, Islamabad, Pakistan; Abdul Ghafoor, NARC, Plant Genetic Resources Program, NARC, Islamabad, Pakistan. Received 11/17/2004.

PI 636475. Vigna mungo (L.) Hepper
Cultivar. Pureline. "Pk-45921". CV-237. Pedigree - Pk-45921 was isolated from local landraces collected from the predominantly rainfed Narowal district of Punjab province. The cultivar matures within 70 d during both spring and summer seasons producing an average of 800 and 1200 kg/h. Plants of this cultivar are semi erect, plant height ranging from 30(plus or minus)5 cm (spring) to 40(plus or minus)6 cm (summer), pubescent, seeds are brown with black spots and 100 seed weight at 8% moisture is 4.59(plus or minus)0.19 g. Grain yield of this cultivar is at par with Mash 1, an approved black gram variety that matures within 75 d during summer season, but takes 85 d during spring season. This cultivar is tolerant to Mungbean Yellow Mosaic Virus.

The following were developed by Ken Russell, University of Nebraska-Lincoln, Department of Agronomy and Horticulture, 279 Plant Science Bldg., 38th and Fair, Lincoln, Nebraska 68583-0915, United States. Received 12/13/2004.

PI 636476. Zea mays L.
Breeding. Population. NB[RFS_NS]1_8; NB[RFS]1_8. GP-489. Pedigree - This population was developed by eight cycles of reciprocal recurrent full-sib selection from NB_0. This population attains 50% silk emergence in approximately 1500 heat units. This population was developed by eight cycles of reciprocal recurrent full-sib selection from NB_0. The latter was developed from intermating three selected sub-populations of the original B synthetic, which was synthesized by open-pollination in isolation of the following 32 inbred lines: A, A374,

A375, C.C. 16, C.C. 5, C.C. 7, I198, I234, Ill.5120, Ill.530, Ill.90, Ill.A-48, Ill.D6, Ill.K, Ill.L, Ill.R4, ITE701, K4, M14, Oh04, Oh26-14, Oh28, Oh40B, Oh51A, Oh54-14, Oh608B, Os426, P8, Pr, Tr, US4-8, and US540. The tester plants were plants from a NS population at a comparable stage of selection. In each cycle of selection, 10 S1 families were recombined in a partial diallel to form the next cycle of the population. The 10 S1s were identified based on truncation selection of 100 reciprocal full-sib families that were evaluated in multiple location field trials for a selection index that was determined from grain yield, percentage of standing plants at harvest, and percentage of ears not dislodged from the stalks prior to harvest. NB[RFS_NB]1_8 is the first of three sub-populations independently developed by this method of selection from NB_0. This population attains 50% silk emergence in approximately 1500 heat units.

PI 636477. Zea mays L.
Breeding. Population. NB[RFS_NS]2_8; NB[RFS]2_8. GP-490. Pedigree - This population was developed by eight cycles of reciprocal recurrent full-sib selection from NB_0. This population attains 50% silk emergence in approximately 1575 heat units. This population was developed by eight cycles of reciprocal recurrent full-sib selection from NB_0. The latter was developed from intermating three selected sub-populations of the original B synthetic, which was synthesized by open-pollination in isolation of the following 32 inbred lines: A, A374, A375, C.C. 16, C.C. 5, C.C. 7, I198, I234, Ill.5120, Ill.530, Ill.90, Ill.A-48, Ill.D6, Ill.K, Ill.L, Ill.R4, ITE701, K4, M14, Oh04, Oh26-14, Oh28, Oh40B, Oh51A, Oh54-14, Oh608B, Os426, P8, Pr, Tr, US4-8, and US540. The tester plants were plants from a NS population at a comparable stage of selection. In each cycle of selection, 10 S1 families were recombined in a partial diallel to form the next cycle of the population. The 10 S1s were identified based on truncation selection of 100 reciprocal full-sib families that were evaluated in multiple location field trials for a selection index that was determined from grain yield, percentage of standing plants at harvest, and percentage of ears not dislodged from the stalks prior to harvest. NB[RFS_NB]2_8 is the second of three sub-populations independently developed by this method of selection from NB_0. This population reaches 50% silk emergence in approximately 1575 heat units.

PI 636478. Zea mays L.
Breeding. Population. NB[RFS_NS]3_8; NB[RFS]3_8. GP-491. Pedigree - This population was developed by eight cycles of reciprocal recurrent full-sib selection from NB_0. This population attains 50% silk emergence in approximately 1550 heat units. This population was developed by eight cycles of reciprocal recurrent full-sib selection from NB_0. The latter was developed from intermating three selected sub-populations of the original B synthetic, which was synthesized by open-pollination in isolation of the following 32 inbred lines: A, A374, A375, C.C. 16, C.C. 5, C.C. 7, I198, I234, Ill.5120, Ill.530, Ill.90, Ill.A-48, Ill.D6, Ill.K, Ill.L, Ill.R4, ITE701, K4, M14, Oh04, Oh26-14, Oh28, Oh40B, Oh51A, Oh54-14, Oh608B, Os426, P8, Pr, Tr, US4-8, and US540. The tester plants were plants from a NS population at a comparable stage of selection. In each cycle of selection, 10 S1 families were recombined in a partial diallel to form the next cycle of the population. The 10 S1s were identified based on truncation selection of 100 reciprocal full-sib families that were evaluated in multiple location field trials for a selection index that was determined from

grain yield, percentage of standing plants at harvest, and percentage of ears not dislodged from the stalks prior to harvest. NB[RFS_NB]3_8 is the third of three sub-populations independently developed by this method of selection from NB_0. This population reaches 50% silk emergence in approximately 1550 heat units.

PI 636479. Zea mays L.
Breeding. Population. NS[RFS_NB]1_8; NS[RFS]1_8. GP-492. Pedigree - This population was developed by eight cycles of reciprocal recurrent full-sib selection from the Nebraska Stiff Stalk population, NS_0. This population reaches 50% silk emergence in approximately 1475 heat units. This population was developed by eight cycles of reciprocal recurrent full-sib selection from the Nebraska Stiff Stalk population, NS_0. The latter was derived from the Iowa Stiff Stalk population that was obtained by John Lonnquist from George Sprague in 1948 by two cycles of selection for general combining ability. The original Iowa Stiff Stalk population was formed with equal contributions from each of the following 16 inbreds: A3G-3-1-3, CI187-2, CI540, CI617, F1B1-7-1, I159, I224, Ill.12E, Ill.Hy, Ind.461-3, Ind.Ah83, Ind.Tr9-1-1-6, LE23, and Oh3167B, Os420, and WD456. The tester plants were plants from a NB population at a comparable stage of selection. In each cycle of selection, 10 S1 families were recombined in a partial diallel to form the next cycle of the population. The 10 S1s were identified based on truncation selection of 100 reciprocal full-sib families that were evaluated in multiple location field trials for a selection index that was determined from grain yield, percentage of standing plants at harvest, and percentage of ears not dislodged from the stalks prior to harvest. NS[RFS_NB]1_8 is the first of three sub-populations independently developed by this method of selection from NS_0. This population reaches 50% silk emergence in approximately 1475 heat units.

PI 636480. Zea mays L.
Breeding. Population. NS[RFS_NB]2_8; NS[RFS]2_8. GP-493. Pedigree - This population was developed by eight cycles of reciprocal recurrent full-sib selection from the Nebraska Stiff Stalk population, NS_0. This population reaches 50% silk emergence in approximately 1600 heat units. This population was developed by eight cycles of reciprocal recurrent full-sib selection from the Nebraska Stiff Stalk population, NS_0. The latter was derived from the Iowa Stiff Stalk population that was obtained by John Lonnquist from George Sprague in 1948 by two cycles of selection for general combining ability. The original Iowa Stiff Stalk population was formed with equal contributions from each of the following 16 inbreds: A3G-3-1-3, CI187-2, CI540, CI617, F1B1-7-1, I159, I224, Ill.12E, Ill.Hy, Ind.461-3, Ind.Ah83, Ind.Tr9-1-1-6, LE23, and Oh3167B, Os420, and WD456. The tester plants were plants from a NB population at a comparable stage of selection. In each cycle of selection, 10 S1 families were recombined in a partial diallel to form the next cycle of the population. The 10 S1s were identified based on truncation selection of 100 reciprocal full-sib families that were evaluated in multiple location field trials for a selection index that was determined from grain yield, percentage of standing plants at harvest, and percentage of ears not dislodged from the stalks prior to harvest. NS[RFS_NB]2_8 is the second of three sub-populations independently developed by this method of selection from NS_0. This population reaches silk emergence in approximately 1600 heat units.

PI 636481. Zea mays L.
Breeding. Population. NS[RFS_NB]3_8; NS[RFS3_8. GP-494. Pedigree - This population was developed by eight cycles of reciprocal recurrent full-sib selection from the Nebraska Stiff Stalk population, NS_0. This population reaches 50% silk emergence in approximately 1525 heat units. This population was developed by eight cycles of reciprocal recurrent full-sib selection from the Nebraska Stiff Stalk population, NS_0. The latter was derived from the Iowa Stiff Stalk population that was obtained by John Lonnquist from George Sprague in 1948 by two cycles of selection for general combining ability. The original Iowa Stiff Stalk population was formed with equal contributions from each of the following 16 inbreds: A3G-3-1-3, CI187-2, CI540, CI617, F1B1-7-1, I159, I224, Ill.12E, Ill.Hy, Ind.461-3, Ind.Ah83, Ind.Tr9-1-1-6, LE23, and Oh3167B, Os420, and WD456. The tester plants were plants from a NB population at a comparable stage of selection. In each cycle of selection, 10 S1 families were recombined in a partial diallel to form the next cycle of the population. The 10 S1s were identified based on truncation selection of 100 reciprocal full-sib families that were evaluated in multiple location field trials for a selection index that was determined from grain yield, percentage of standing plants at harvest, and percentage of ears not dislodged from the stalks prior to harvest. NS[RFS_NB]3_8 is the third of three sub-populations independently developed by this method of selection from NS_0. This population reaches 50% silk emergence in approximately 1525 heat units.

PI 636482. Zea mays L.
Breeding. Population. NS[S1]1_8. GP-495. Pedigree - This population was developed by eight cycles of S1 per se selection from the Nebraska Stiff Stalk population, NS_0. This population reaches 50% silk emergence in approximately 1515 heat units. This population was developed by eight cycles of S1 per se selection from the Nebraska Stiff Stalk population, NS_0. The latter was derived from the Iowa Stiff Stalk population that was obtained by John Lonnquist from George Sprague in 1948 by two cycles of selection for general combining ability. The original Iowa Stiff Stalk population was formed with equal contributions from each of the following 16 inbreds: A3G-3-1-3, CI187-2, CI540, CI617, F1B1-7-1, I159, I224, Ill.12E, Ill.Hy, Ind.461-3, Ind.Ah83, Ind.Tr9-1-1-6, LE23, and Oh3167B, Os420, and WD456. In each cycle of selection, 10 S1 families were recombined in a partial diallel to form the next cycle of the population. The 10 S1s were identified based on truncation selection of 100 S1 families that were evaluated in multiple location field trials for a selection index that was determined from grain yield, percentage of standing plants at harvest, and percentage of ears not dislodged from the stalks prior to harvest. NS[S1]1_8 is the first of three sub-populations independently developed by this method of selection from NS_0. This population reaches 50% silk emergence in approximately 1515 heat units.

PI 636483. Zea mays L.
Breeding. Population. NS[S1]2_8. GP-496. Pedigree - This population was developed by eight cycles of S1 per se selection from the Nebraska Stiff Stalk population, NS_0. This population reaches 50% silk emergence in approximately 1480 heat units. This population was developed by eight cycles of S1 per se selection from the Nebraska Stiff Stalk population, NS_0. The latter was derived from the Iowa Stiff Stalk population that was obtained by John Lonnquist from George Sprague in 1948 by two cycles of selection for general combining ability. The original Iowa Stiff

Stalk population was formed with equal contributions from each of the following 16 inbreds: A3G-3-1-3, CI187-2, CI540, CI617, F1B1-7-1, I159, I224, Ill.12E, Ill.Hy, Ind.461-3, Ind.Ah83, Ind.Tr9-1-1-6, LE23, and Oh3167B, Os420, and WD456. In each cycle of selection, 10 S1 families were recombined in a partial diallel to form the next cycle of the population. The 10 S1s were identified based on truncation selection of 100 S1 families that were evaluated in multiple location field trials for a selection index that was determined from grain yield, percentage of standing plants at harvest, and percentage of ears not dislodged from the stalks prior to harvest. NS[S1]2_8 is the second of three sub-populations independently developed by this method of selection from NS_0. This population reaches 50% silk emergence in approximately 1480 heat units.

PI 636484. Zea mays L.
Breeding. Population. NS[S1]3_8. GP-497. Pedigree - This population was developed by eight cycles of S1 per se selection from the Nebraska Stiff Stalk population, NS_0. This population reaches 50% silk emergence in approximately 1460 heat units. This population was developed by eight cycles of S1 per se selection from the Nebraska Stiff Stalk population, NS_0. The latter was derived from the Iowa Stiff Stalk population that was obtained by John Lonnquist from George Sprague in 1948 by two cycles of selection for general combining ability. The original Iowa Stiff Stalk population was formed with equal contributions from each of the following 16 inbreds: A3G-3-1-3, CI187-2, CI540, CI617, F1B1-7-1, I159, I224, Ill.12E, Ill.Hy, Ind.461-3, Ind.Ah83, Ind.Tr9-1-1-6, LE23, and Oh3167B, Os420, and WD456. In each cycle of selection, 10 S1 families were recombined in a partial diallel to form the next cycle of the population. The 10 S1s were identified based on truncation selection of 100 S1 families that were evaluated in multiple location field trials for a selection index that was determined from grain yield, percentage of standing plants at harvest, and percentage of ears not dislodged from the stalks prior to harvest. NS[S1]3_8 is the third of three sub-populations independently developed by this method of selection from NS_0. This reaches 50% silk emergence in approximately 1460 heat units.

PI 636485. Zea mays L.
Breeding. Population. NB[S1]1_8. GP-498. Pedigree - This population was developed by eight cycles of S1 selection from NB_0. This population reaches 50% silking in approximately 1525 heat units. This population was developed by eight cycles of S1 selection from NB_0. The latter was developed from intermating three selected sub-populations of the original B synthetic, which was synthesized by open-pollination in isolation of the following 32 inbred lines: A, A374, A375, C.C. 16, C.C. 5, C.C. 7, I198, I234, Ill.5120, Ill.530, Ill.90, Ill.A-48, Ill.D6, Ill.K, Ill.L, Ill.R4, ITE701, K4, M14, Oh04, Oh26-14, Oh28, Oh40B, Oh51A, Oh54-14, Oh608B, Os426, P8, Pr, Tr, US4-8, and US540. In each cyc le of selection, 10 S1 families were recombined in a partial diallel to form the next cycle of the population. The 10 S1s were identified based on truncation selection of 100 S1 families that were evaluated in multiple location field trials for a selection index that was determined from grain yield, percentage of standing plants at harvest, and percentage of ears not dislodged from the stalks prior to harvest. NB[S1]1_8 is the first of three sub-populations independently developed by this method of selection from NB_0. This population reaches 50% silking in approximately 1525 heat units.

PI 636486. Zea mays L.
Breeding. Population. NB[S1]2_8. GP-499. Pedigree - This population was developed by eight cycles of S1 selection from NB_0. This population reaches 50% silking in approximately 1525 heat units. This population was developed by eight cycles of S1 selection from NB_0. The latter was developed from intermating three selected sub-populations of the original B synthetic, which was synthesized by open-pollination in isolation of the following 32 inbred lines: A, A374, A375, C.C. 16, C.C. 5, C.C. 7, I198, I234, Ill.5120, Ill.530, Ill.90, Ill.A-48, Ill.D6, Ill.K, Ill.L, Ill.R4, ITE701, K4, M14, Oh04, Oh26-14, Oh28, Oh40B, Oh51A, Oh54-14, Oh608B, Os426, P8, Pr, Tr, US4-8, and US540. In each cyc le of selection, 10 S1 families were recombined in a partial diallel to form the next cycle of the population. The 10 S1s were identified based on truncation selection of 100 S1 families that were evaluated in multiple location field trials for a selection index that was determined from grain yield, percentage of standing plants at harvest, and percentage of ears not dislodged from the stalks prior to harvest. NB[S1]2_8 is the second of three sub-populations independently developed by this method of selection from NB_0. This population reaches 50% silk emergence in approximately 1525 heat units.

PI 636487. Zea mays L.
Breeding. Population. NB[S1]3_8. GP-500. Pedigree - This population was developed by eight cycles of S1 selection from NB_0. This population reaches 50% silking in approximately 1475 heat units. This population was developed by eight cycles of S1 selection from NB_0. The latter was developed from intermating three selected sub-populations of the original B synthetic, which was synthesized by open-pollination in isolation of the following 32 inbred lines: A, A374, A375, C.C. 16, C.C. 5, C.C. 7, I198, I234, Ill.5120, Ill.530, Ill.90, Ill.A-48, Ill.D6, Ill.K, Ill.L, Ill.R4, ITE701, K4, M14, Oh04, Oh26-14, Oh28, Oh40B, Oh51A, Oh54-14, Oh608B, Os426, P8, Pr, Tr, US4-8, and US540. In each cyc le of selection, 10 S1 families were recombined in a partial diallel to form the next cycle of the population. The 10 S1s were identified based on truncation selection of 100 S1 families that were evaluated in multiple location field trials for a selection index that was determined from grain yield, percentage of standing plants at harvest, and percentage of ears not dislodged from the stalks prior to harvest. NB[S1]3_8 is the third of three sub-populations independently developed by this method of selection from NB_0. This population reaches 50% silk emergence in approximately 1475 heat units.

PI 636488. Zea mays L.
Breeding. Population. KLS_30. GP-454. Pedigree - This population was developed by 30 cycles of mass selection for large seed size from the open-pollinated variety, Krug Yellow Dent. This population reaches 50% silk emergence in approximately 1475 heat units. This population was developed by 30 cycles of mass selection for large seed size from the open-pollinated variety, Krug Yellow Dent. This variety was derived from the three-way cross, (a Nebraska strain of Reid Yellow Dent x Goldmine) x an Illinois strain of Reid Yellow Dent. The same selection procedure was used to develop each cycle of the population. Approximately 1500 plants were grown in isolation, and at harvest an equal number of kernel from open-pollinated ears with consistently the largest kernels were composited to form the next cycle. The selection intensity was approximately 1%. Through cycle 20, the 1000 kernel weight in this population had increased at

a linear rate of 4.7 g per cycle. KLS_30 has a 1000 kernel weight that is 363.0 g greater than the 1000 kernel weight of KSS_30, a population derived from the same base population as KLS_30 and selected following the same protocol except selection was for small seed size. This population reaches 50% silk emergence in approximately 1475 heat units.

PI 636489. Zea mays L.
Breeding. Population. KSS_30. GP-455. Pedigree - This population was developed by 30 cycles of mass selection for small seed size from the open-pollinated variety, Krug Yellow Dent. This population reaches 50% silking in approximately 1550 heat units. This population was developed by 30 cycles of mass selection for small seed size from the open-pollinated variety, Krug Yellow Dent. This variety was derived from the three-way cross, (a Nebraska strain of Reid Yellow Dent x Goldmine) x an Illinois strain of Reid Yellow Dent. The same selection procedure was used to develop each cycle of the population. Approximately 1500 plants were grown in isolation, and at harvest an equal number of kernel from open-pollinated ears with consistently the smallest kernels were composited to form the next cycle. The selection intensity was approximately 1%. Through cycle 20, the 1000 kernel weight in this population had decreased at a linear rate of 7.2 g per cycle. KSS_30 has a 1000 kernel weight that is 363.0 g less than the 1000 kernel weight of KLS_30, a population derived from the same base population as KSS_30 and selected following the same protocol except selection was for large seed size. This population reaches 50% silk emergence in approximately 1500 heat units.

The following were developed by Peggy Thaxton, Texas A&M University, Dept. of Soil and Crop Science, College Station, Texas 77843, United States; C. Wayne Smith, Texas A&M University, Department of Soil and Crop Sciences, 2474 TAMUS, College Station, Texas 77843-2474, United States; Roy Cantrell, Cotton Incorporated, 6399 Weston Parkway, Cary, North Carolina 27513, United States. Received 12/21/2004.

PI 636490. Gossypium hirsutum L.
Breeding. Pureline. TAM 98D-102. GP-793. Pedigree - MD-51ne (cultivar which has insect resistance, a high fiber strength and nectariless developed by USDA in Stoneville, MS), and F4 90212 (ne), (unreleased breeding line developed in the CIL). A pubescent leaf and stem line that combines high yield potential with excellent fiber qualities, especially fiber strength, and is adapted to south and central Texas. Is a mid-season maturity, picker-type upland cotton with a growth habit similar to Tamcot 22 when grown with supplemental irrigation. Average yield is similar to Suregrow 747 and FiberMax 832. Upper Half Mean (UHM) length averages 1.14 in., longer than Suregrow 747 but not as long as FiberMax 832. Averaged over the performance trials high volume instrument fiber bundle strength averaged 36.6 g/tex, similar to FiberMax 832. The average micronaire reading is 4.4 which is similar to SureGrow 747.

PI 636491. Gossypium hirsutum L.
Breeding. Pureline. TAM 98D-99ne. GP-794. Pedigree - MD-51ne (cultivar which has insect resistance, a high fiber strength and nectariless developed by USDA in Stoneville, MS), and F4 90212 (ne), (unreleased breeding line developed in the CIL). A nectariless, pubescent leaf and stem line that combines high yield potential with excellent fiber

qualities, especially fiber strength, and is adapted to south and central Texas. Is a mid-season maturity, picker-type upland cotton with a growth habit similar to Tamcot 22 when grown with supplemental irrigation. Average yield is similar to Suregrow 747 and FiberMax 832. Upper Half Mean (UHM) length averages 1.12 in. longer than Suregrow 747 but not as long as FiberMax 832. Averaged over the performance trials high volume instrument fiber bundle strength averaged 33.6 g/tex, similar to FiberMax 832. The average micronaire reading is 4.8 which is similar to SureGrow 747.

The following were developed by Yulin Jia, USDA-ARS, Dale Bumpers National Rice Res. Ctr., 2890 Hwy 130 East, Stuttgart, Arkansas 72160, United States. Received 12/15/2004.

PI 636492. Oryza sativa L.

Genetic. Pureline. Katy lesion mimic mutant 1; GSOR 20. GS-2. Pedigree - The same as Katy rice. Katy lesion mimic mutant 1 was induced from Katy rice. The leaf shape and morphology are similar to that of Katy. Irregular brown lesions similar to that of Sekeguchi lesions are a significant feature for this genetic stock. Enhanced resistance to rice blast and sheath blight pathogens were observed in the laboratory and greenhouse. In greenhouse grown plants, about 10 cm reduction of plant height was observed in lesion expression plants. The seed size and green weight are almost identical to that of Katy rice.

The following were developed by Marcelo J. Carena, North Dakota State University, Department of Plant Science, Loftsgard Hall 374D, Fargo, North Dakota 58105-5051, United States. Donated by Marcelo J. Carena, North Dakota State University, Department of Plant Science, Loftsgard Hall 374D, Fargo, North Dakota 58105-5051, United States; D.D. Wanner, North Dakota State Univ., Dept. of Plant Sciences, P.O. Box 5051, Fargo, North Dakota 58105, United States. Received 12/17/2004.

PI 636493. Zea mays L. **subsp. mays**

Breeding. Population. NDSAB(MER-FS)C13. GP-399. Pedigree - NDSAB. A yellow-dent maize population that was developed at the North Dakota Agricultural Experiment Station, Fargo, ND, as a result of long-term germplasm improvement, for breeding programs developing elite germplasm for short-growing-season. It is an improved germplasm source for development of inbred parents for early maturing, high quality, and high yielding corn hybrids. Population hybrids including NDSAB(MER-FS)C13 were not statistically different from the top commercial check for grain yield performance and root and stalk lodging percentages. Therefore, this population is not only an elite source for inbred line development but also a potential product for alternative production systems to commercial hybrids. This is a vigorous population with above average emergence percentage in cold soils. It typically produces medium-tall plants with medium ears. Each plant develops an average of one ear per plant, and is similar in days to flowering to Pioneer 39D82 and is earlier than previous NDSAB versions (AES 200 maturity). In trials this was top performer of all populations and significantly improved from unreleased experimental NDSAB(MER)C12 for grain yield, stalk lodging resistance, and starch content. It also tended to be drier at harvest with higher grain protein content. Starch content of is as high as any commercial hybrid tested.

The following were developed by James S. Beaver, University of Puerto Rico, Mayaguez Camp, Department of Agronomy & Soils, P. O. Box 9030, Mayaguez, Puerto Rico; Phillip Miklas, USDA, ARS, Irrigated Agric. Research & Extension Ctr., 24106 North Bunn Road, Prosser, Washington 99350-9687, United States; C.G. Munoz Perea, University of Idaho, Dept. of Plant, Soil and Entomological Sciences, Moscow, Idaho 83844, United States; J.M. Osorno, University of Puerto Rico, Dept. of Agronomy and Soils, P.O. Box 9030, Mayaguez, Puerto Rico; F.H. Ferwerda, University of Puerto Rico, Dept. of Horticulture, P.O. Box 9030, Mayaguez, Puerto Rico. Received 12/28/2004.

PI 636494. Phaseolus vulgaris L.
Breeding. Pureline. PR9771-3-2. GP-239. Pedigree - HP8437-95 / G35172 // HP8437-95. A bean golden yellow mosaic virus (BGYMV) resistant common bean germplasm line with resistance derived from scarlet runner bean CIAT accession G35172. Has the SCAR marker SW-12 associated with a QTL for resistance to BGYMV and the SW13 SCAR linked to the I gene for resistance bean common mosaic virus. Seed is small, red, and has a 100 seed wt. of 22 g and an indeterminate growth habit (Type III). Flowers approximately 35 days after planting (DAP) and matures 76 DAP. In Puerto Rico, is resistant to endemic races of rust and susceptible to common bacterial blight.

PI 636495. Phaseolus vulgaris L.
Breeding. Pureline. PR0247-49. GP-240. Pedigree - Morales / PR9771-1-3. A bean golden yellow mosaic virus (BGYMV) resistant common bean germplasm line with resistance derived from scarlet runner bean CIAT accession G35172. Has the SCAR marker SW-12 associated with a QTL for resistance to BGYMV. Seed is shiny black and has a 100 seed wt. of 20 g and an indeterminate growth habit (Type III). Flowers approximately 38 days after planting (DAP) and matures 74 DAP. In Puerto Rico, is resistant to endemic races of rust and susceptible to common bacterial blight.

PI 636496. Phaseolus vulgaris L.
Breeding. Pureline. PR0157-4-1. GP-241. Pedigree - Arroyo Loro / PR9771-3-1. A bean golden yellow mosaic virus (BGYMV) resistant common bean germplasm line with resistance derived from scarlet runner bean CIAT accession G35172. Has the SCAR marker SW-12 associated with a QTL for resistance to BGYMV and the SW13 SCAR linked to the I gene for resistance bean common mosaic virus.. Seed is white and has a 100 seed wt. of 23 g and an indeterminate growth habit (Type III). Flowers approximately 35 days after planting (DAP) and matures 76 DAP. In Puerto Rico, is resistant to endemic races of rust and susceptible to common bacterial blight.

The following were developed by Mike Grisham, USDA-ARS, Sugarcane Research Unit, P.O. Box 470, Houma, Louisiana 70361, United States; William H. White, USDA, ARS, Sugarcane Research Unit, Houma, Louisiana 70361, United States; D.D. Garrison, USDA, ARS, SRRC, Sugarcane Research Unit, Houma, Louisiana 70360, United States; Thomas Tew, USDA, ARS, SRRC, Sugarcane Research Unit, 5883 USDA Road, Houma, Louisiana 70361-0470, United States; David Burner, USDA-ARS, Dale Bumpers Small Farms Res. Center, 6883 South State Hwy 23, Booneville, Arkansas 72927-8209, United States; John C. Veremis, USDA-ARS, SRRC, Sugarcane Research Unit, 5883 USDA Rd., Houma, Louisiana 70360, United

States; Benjamin Legendre, Louisiana State University, Sugar Station, P.O. Box 604, St. Gabriel, Louisiana 70776, United States; E.O. Dufrene, USDA-ARS, SRRC, Sugarcane Research Unit, Houma, Louisiana 70360, United States; Y.-B. Pan, USDA-ARS, SRRC, Sugarcane Research Unit, Houma, Louisiana 70360, United States; E.P. Richard, USDA-ARS, SRRC, Sugarcane Research Unit, Houma, Louisiana 70360, United States. Received 12/22/2004.

PI 636497. Saccharum sp.
Clone. Pureline. "Ho 95-988". CV-124. Pedigree - CP 86-941 X US 89-12. Ho 95-988 has a high percentage of medium-sized stalks that turn purple when exposed to sunlight. Compared with most other cultivars, the leaves of Ho 95-988 remain relatively upright. Leaf sheath pubescence is negligible; auricles are generally absent; and the stalk is coated with only a moderate layer of white wax.

The following were developed by Daryl Klindworth, USDA-ARS, Northern Crop Science Lab, 1307 N. 18th St., Fargo, North Dakota 58105-5677, United States; Elias M. Elias, North Dakota State University, Department of Plant Sciences, P.O. Box 5051, Fargo, North Dakota 58105-5051, United States; Steven Xu, USDA-ARS, Northern Crop Science Laboratory, 1307 18th St. North, Fargo, North Dakota 58105-5677, United States. Received 12/27/2004.

PI 636498. Triticum turgidum subsp. durum (Desf.) Husn.
Breeding. Pureline. L092. GP-796. Pedigree - Langdon1D(1A)/Len//Langdon/3/2*Renville. Released 2004. Carries a translocated 1AS.1AL-1DL chromosome upon which the gene Glu-D1d that encodes for high-molecular-weight glutenin (HMW) subunits 1Dx5 and 1Dy10 (5+10) is located. This germplasm was produced in an effort to develop dual-purpose (good pasta and bread-baking quality) durum wheats. The size of the translocated segment comprises approximately 30% of the distal end of the translocated arm. The translocation breakpoint lies in an interval of less than 7.0 cM between microsatellite markers X gwm135 and Xgwm357. In agronomic and quality trials conducted it had significantly lower mean yield than Renville. It was similar to Renville for plant height, but was more susceptible to lodging than Renville, and was two days later in heading than Renville. In addition to HMW glutenin subunits 5+10, it also has HMW glutenin subunits 1Bx6 and 1By8 conditioned by the Glu-B1d allele, and has identical low-molecular-weight (LMW) glutenin subunits and gliadins as in Renville. Will be useful primarily for breeders as parents in crosses searching for combinations of glutenin or gliadins genes that will improve baking quality of durum wheat.

PI 636499. Triticum turgidum subsp. durum (Desf.) Husn.
Breeding. Pureline. L252. GP-797. Pedigree - Langdon1D(1A)/Len//Langdon/3/2*Renville. Released 2004. Carries a translocated 1AS.1AL-1DL chromosome upon which the gene Glu-D1d that encodes for high-molecular-weight glutenin (HMW) subunits 1Dx5 and 1Dy10 (5+10) is located. This germplasm was produced in an effort to develop dual-purpose (good pasta and bread-baking quality) durum wheats. The size of the translocated segment comprises approximately 30% of the distal end of the translocated arm. The translocation breakpoint lies in an interval of less than 7.0 cM between microsatellite markers X gwm135 and Xgwm357. In agronomic and quality trials conducted it had significantly lower mean yield than Renville. It was similar to Renville for plant height, but was more susceptible to lodging than

Renville, and was two days later in heading than Renville. In addition to HMW glutenin subunits 5+10, it also has HMW glutenin subunits 1Bx6 and 1By8 conditioned by the Glu-B1d allele, and has identical low-molecular-weight (LMW) glutenin subunits and gliadins as in Renville. Will be useful primarily for breeders as parents in crosses searching for combinations of glutenin or gliadins genes that will improve baking quality of durum wheat.

PI 636500. Triticum turgidum subsp. durum (Desf.) Husn.
Breeding. Pureline. S99B33. GP-798. Pedigree - Langdon1D(1A)/Len//Langdon/3/2*Renville. Released 2004. Carries a translocated 1AS.1AL-1DL chromosome upon which the gene Glu-D1d that encodes for high-molecular-weight glutenin (HMW) subunits 1Dx5 and 1Dy10 (5+10) is located. This germplasm was produced in an effort to develop dual-purpose (good pasta and bread-baking quality) durum wheats. The size of the translocated segment comprises approximately 30% of the distal end of the translocated arm. The translocation breakpoint lies in an interval of less than 7.0 cM between microsatellite markers X gwm135 and Xgwm357. In agronomic and quality trials conducted it was among the best yielding translocation lines but still had a lower mean yield than Renville. It was similar to Renville for plant height, but was more susceptible to lodging than Renville, and was two days later in heading than Renville. In addition to HMW glutenin subunits 5+10, it also has HMW glutenin subunits 1Bx6 and 1By8 conditioned by the Glu-B1d allele, and has identical low-molecular-weight (LMW) glutenin subunits and gliadins as in Renville. Will be useful primarily for breeders as parents in crosses searching for combinations of glutenin or gliadins genes that will improve baking quality of durum wheat.

PI 636501. Triticum turgidum subsp. durum (Desf.) Husn.
Breeding. Pureline. S99B34. GP-799. Pedigree - Langdon1D(1A)/Len//Langdon/3/2*Renville. Released 2004. Carries a translocated 1AS.1AL-1DL chromosome upon which the gene Glu-D1d that encodes for high-molecular-weight glutenin (HMW) subunits 1Dx5 and 1Dy10 (5+10) is located. This germplasm was produced in an effort to develop dual-purpose (good pasta and bread-baking quality) durum wheats. The size of the translocated segment comprises approximately 30% of the distal end of the translocated arm. The translocation breakpoint lies in an interval of less than 7.0 cM between microsatellite markers X gwm135 and Xgwm357. In agronomic and quality trials conducted it was among the best yielding translocation lines but still had a lower mean yield than Renville. It was similar to Renville for plant height, but was more susceptible to lodging than Renville, and was two days later in heading than Renville. In addition to HMW glutenin subunits 5+10, it also has HMW glutenin subunits 1Bx6 and 1By8 conditioned by the Glu-B1d allele, and has identical low-molecular-weight (LMW) glutenin subunits and gliadins as in Renville. Will be useful primarily for breeders as parents in crosses searching for combinations of glutenin or gliadins genes that will improve baking quality of durum wheat.

The following were developed by Arnel R. Hallauer, Iowa State University, Department of Agronomy, 1401 Agronomy Hall, Ames, Iowa 50011-1010, United States. Received 12/22/2004.

PI 636502. Zea mays L. **subsp. mays**
Breeding. Population. BSLE(M-L)C30. GP-402. Pedigree - BSLE(M-L)C30 was

selected from Iowa Long Ear Synthetic after 30 generations of mass selection for greater ear length. A strain of Iowa Long Ear Synthetic (BSLECO) developed by 30 cycles of mass selection for increased ear length. Average ear length increased 0.27 cm/cycle of mass seletion. Ear length of BSLE(M-L)C27 was 27.3 cm compared with 20.0 cm for BSLECO. Selection for increased ear length did not increase grain yield; there was a nonsignificant yield decrease of 0.27 t/ha after 27 cycles of mass selection for increased ear length. Correlated changes with mass selection for increased ear length included increases in plant (41 cm) and ear (27 cm) height and days to flower (5.7 d), whereas ear diameter (0.54 cm) and number of kernel rows (1.6) decreased compared with BSLECO. Root and stalk lodging and prolificacy also increased with mass selection for increased ear length.

PI 636503. Zea mays L. **subsp. mays**
Breeding. Population. BSLE(M-S)C30. GP-401. Pedigree - BSLE(M-S)C30 was selected from Iowa Long Ear Synthetic after 30 generations of mass selection for greater ear length. A strain of Iowa Long Ear Synthetic (BSLECO) developed after 30 cycles of mass selection for reduced ear length. Average ear length decreased 0.37 cm/cycle of mass selection. After 27 cycles of mass selection, ear length was 10 cm less than average ear length of BSLECO. Correlated changes with selection for reduced ear length included 2.20 t/ha less grain yield, reductions of 43 cm for plant height, 22 cm for ear height, and 5.7 d for days to flower, increases 0.27 cm for ear diameter and 3.0 for number of kernel rows, and reductions in root and stalk lodging compared with BSLECO.

The following were donated by J. Mattatia, Agricultural Research Organization, Department of Plant Introduction, P.O. 6, Bet-Dagan, Central, Israel. Received 10/30/1984.

PI 636504. Dasypyrum villosum (L.) P. Candargy
Wild. JM 3797; W6 7391; W6 7291. Collected 07/17/1984 in Greece. Plants growing along margins of cultivated fields of cereals and roadsides, in loam and clay with low stones, 3km from Ritsona, on road from Ritsona to Chalkida, Boeotea, Central Greece. Plants growing with Pyrus amygdaliformis, Avena sterilis, Hordeum bulbosum, Daucus carrota, and annual and perennial grasses.

PI 636505. Dasypyrum villosum (L.) P. Candargy
Wild. JM 3816; W6 7294. Collected 07/17/1984 in Greece. Plants growing along margins of cultivated cereal fields and roadsides, on hills in loam with medium stones and good drainage, 3km from Mauriki, on road from Mauriki to main national road, Athens to Lamia, Boeotea, Central Greece. Plants growing with ruderal plants on roadsides, Silybum marianum, and Picnomon.

The following were donated by Welsh Plant Breeding Station, Genetic Resources Unit, Aberystwyth, Wales, United Kingdom. Received 09/03/1991.

PI 636506. Cynosurus cristatus L.
Wild. ABY-BG 524.81; W6 9055. Collected in Wales, United Kingdom. Latitude 52° 25' N. Longitude 3° 50' W. Elevation 330 m. Ponterwyd.

PI 636507. Cynosurus cristatus L.
Wild. ABY-BG 527.81; W6 9058. Collected in Wales, United Kingdom. Latitude 52° 25' N. Longitude 3° 50' W. Elevation 274 m. Ponterwyd.

PI 636508. Lolium multiflorum Lam.
Wild. ABY-BB 1678.75; W6 9256. Collected in Italy. Latitude 45° 30' N. Longitude 9° 22' E. Elevation 120 m. Vignate.

PI 636509. Lolium multiflorum Lam.
Wild. ABY-BB 1701.75; W6 9261. Collected in Italy. Latitude 45° 52' N. Longitude 9° 50' E. Elevation 600 m. Gorno.

The following were donated by A.T. Whittemore, Missouri Botanical Garden, Biology Department, P.O. Box 299, St. Louis, Missouri 63166-0299, United States. Received 04/30/1992.

PI 636510. Melica transsilvanica Schur
Cultivated. W6 10442. Collected in Kazakhstan. Just above Alma Ata, Butekovke Canyon.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 08/24/1992.

PI 636511. Agropyron cristatum (L.) Gaertn.
Wild. B92-59; W6 10940. Collected 06/28/1992 in Bulgaria. Elevation 0 m. Off seaside road, 1km N of Albena. Unknown grass.

The following were donated by Research Centre for Agrobotany, I.P.P.Q., H-2766 Tapioszele. Received 11/25/1992.

PI 636512. Festuca pratensis Huds.
Cultivar. "BUKK/10."; IV-41-423; 585; W6 11096.

The following were collected by J.S. Peterson, USDA, SCS, National PMC, Bldg. 509, BARC-East, Beltsville, Maryland 20705, United States. Received 03/24/1993.

PI 636513. Agropyron sp.
Wild. 9070333; W6 11485. Collected 08/19/1992 in Mongolia. Latitude 47° 38' N. Longitude 96° 13' E. Elevation 1824 m. Sandy loam, Durvulgin. Plants associated with Elymus, Leymus, and Achnatherum.

The following were donated by Institute of Introduction and Plant Genetic Resources, K. Malkov Agric. Exp. Stat., Sadovo, Plovdiv 4122, Bulgaria. Received 01/01/1987.

PI 636514. Lens culinaris Medik. **subsp. culinaris**
Cultivar. "N 377"; W6 12015.

PI 636515. Lens culinaris Medik. **subsp. culinaris**
Cultivar. "N 440"; W6 12018.

The following were collected by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 11/02/1993.

PI 636516. Astragalus tibetanus Benth. ex Bunge
Wild. X93193; W6 13099. Collected 08/20/1993 in Xinjiang, China. Latitude 43° 46' N. Longitude 89° 27' E. Elevation 1300 m. Silty clay, 48km south of Chitai, very dry rolling foot hills used for winter pastures, Xinjiang.

PI 636517. Phleum phleoides (L.) H. Karst.
Wild. X93223; W6 13127. Collected 08/24/1993 in Xinjiang, China. Latitude 43° 48' N. Longitude 87° 51' E. Elevation 1600 m. High winter pasture at Tu Juan south of Xiejago Stud Farm, 90km S & E of Urumqi, lowland seepage, upper sites very dry. Bottom lands clay loam, side hills gravely. Dominant species Artemisa boralensis, Stipa capillata, Festuca ovina.

PI 636518. Onobrychis viciifolia Scop.
Wild. X93255; W6 13159. Collected 08/24/1993 in Xinjiang, China. Latitude 43° 50' N. Longitude 87° 55' E. Elevation 1750 m. West exposure slope in foothill mountains, gravely soil, 50km south and east of Urumqi, Xinjiang. Large stand of legumes dominated by Onobrychis and Medicago varia.

The following were collected by Kay H. Asay, USDA, ARS, Forage & Range Research Unit, Utah State University, Logan, Utah 84322-6300, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 10/25/1993.

PI 636519. Festuca pratensis Huds.
Wild. JA-343; VIR U-0134897; W6 13201. Collected 07/30/1992 in Kazakhstan. Latitude 50° 18' N. Longitude 57° 38' E. Elevation 245 m. Along roadway, 30km east of Aktyubinsk. Annual precipitation 350-400mm. Dominant vegetation - Stipa spp. and Artemisia terrae-albae.

PI 636520. Poa bulbosa L.
Wild. JA-359; VIR U-0134992; W6 13217. Collected 07/18/1992 in Kazakhstan. Latitude 47° 32' N. Longitude 58° 17' E. Elevation 220 m. 90km west-southwest of Chelkar. Annual precipitation 180mm. Vegetation - Poa bulbosa, Stipa spp., Agropyron fragile and Agropyron desertorum.

The following were collected by J. Jarvie, Logan, Utah, United States; Y. Cauderon, Versailles, Yvelines, France. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/17/1993.

PI 636521. Thinopyrum junceum (L.) A. Love
Wild. D-3670; BRG-88 #11; MA-9-81--85; W6 13912. Collected in France. Mediterranean coast of France.

The following were collected by Douglas R. Dewey, USDA-ARS, Forage and Range Research Laboratory, Utah State University, UMC-63, Logan, Utah 84322, United States. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/17/1993.

PI 636522. Thinopyrum junceum (L.) A. Love
Wild. D-3566; MB-33-61-70; W6 13913. Collected in Zeeland, Netherlands. Browersdam, man-made dunes.

The following were donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/17/1993.

PI 636523. Thinopyrum ponticum (Podp.) Barkworth & D. R. Dewey
Wild. D-3494; MB-5-41--45; W6 13925. Collected 03/1985 in Argentina. Seleccio Anguil.

The following were collected by Douglas R. Dewey, USDA-ARS, Forage and Range Research Laboratory, Utah State University, UMC-63, Logan, Utah 84322, United States. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 12/10/1993.

PI 636524. Elymus scaber (R. Br.) A. Love
Wild. D-2898; MB-65-26-35 1992; W6 14223. Collected in Unknown.

PI 636525. Elymus trachycaulus (Link) Gould ex Shinners
Wild. D-3276; MB-54-21-30 1992; W6 14228. Collected 08/07/1983 in Colorado, United States. On road to Yankee Boy Basin 1 miles southwest of Ouray, Ouray County, Colorado.

PI 636526. Elymus trachycaulus (Link) Gould ex Shinners
Wild. D-3277; MB-54-11-20 1992; W6 14229. Collected 08/07/1983 in Colorado, United States. Along Beaver Creek Forest Service access road, La Plata County, Colorado.

PI 636527. Elymus lanceolatus (Scribn. & J. G. Sm.) Gould
Wild. D-3297; MA-58-6-10 1986; W6 14235. Collected 08/10/1983 in Wyoming, United States. 0.5 miles north Platte River on Park Bridge Road 4 miles north Saratoga, Carbon County, Wyoming.

The following were collected by Douglas R. Dewey, USDA-ARS, Forage and Range Research Laboratory, Utah State University, UMC-63, Logan, Utah 84322, United States; Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 12/10/1993.

PI 636528. Elymus sp.
Wild. DJ-3919; MB-96-21-30 1991; W6 14380. Collected 08/12/1989 in Russian Federation. Elevation 1160 m. Between 659 and 658km markers, north side of Cheketeman Pass, Gorno Altay A.O., from summit (660km marker on highway M-52 at 1250m elev.) to its base (656km marker and 1010m elev.). Spikes large, erect, intensely purple.

The following were collected by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 12/10/1993.

PI 636529. Elymus glaucus Buckley
Wild. KJ-79; MB-59-61-70 1992; Auto #691; W6 14462. Collected in Unknown. North facing slope Santa Ynex Mountains east Camino Cielo near FAA repeasts, Santa Barbara County. Awns divergent. Grows on weird shale.

The following were collected by Peter Cunningham, Dept. of Agriculture & Rural Affairs, Pastoral Research Institute, P.O. Box 180, Hamilton, Victoria 3300, Australia; Mustapha Bounejmate, Institut National de la Recherche Agrono, Programme Fourrages (INRA), B.P. 415, Rabat, Morocco; Walter Graves, University of California Cooperative Ext. Service (retired), 7665 Volclay Drive, San Diego, California 92119-1219, United States; Saddik Saidi, Morocco. Received 08/19/1994.

PI 636530. Dactylis glomerata L.
Wild. M113.CPG94; W6 15842. Collected 07/20/1994 in Morocco. Latitude 33° 7' 34" N. Longitude 5° 2' 47" W. Elevation 1903 m. Near Timahdite (Foum-Kheneg), 11 k south of Timahdite on P21, Azrou-Midelt. Grazed. Slope 0-5%, aspect W. Area open. Soil sod meadow loam on calcareous bedrock, basalt rock on top, pH 9.5. Rainfall 400 mm. Seasonally dry, cliff. Vegetation open, evergreen steppe scrub. Surrounding veg. degraded evergreen forest. Population abundance rare, distribution patchy. Growth habit erect.

The following were collected by Peter Cunningham, Dept. of Agriculture & Rural Affairs, Pastoral Research Institute, P.O. Box 180, Hamilton, Victoria 3300, Australia; Mohamed Chakroun, INRAT, Forage Improvement Laboratory, Rue Hadi Karray, Ariana, Tunisia; Walter Graves, University of California Cooperative Ext. Service (retired), 7665 Volclay Drive, San Diego, California 92119-1219, United States. Received 08/19/1994.

PI 636531. Festuca arundinacea Schreb.
Wild. T025.CPG94; W6 15999. Collected 06/22/1994 in Tunisia. Latitude 36° 46' 58" N. Longitude 9° 9' 56" E. Elevation 335 m. Near Amdoun, 2 k east of Amdoun on C63. Grazed. Slope 11-40%, aspect W. Area open. Soil clay, pH 8.5+. Rainfall 650 mm. Moist, ravine. Vegetation closed, seasonal tall grass. Surrounding veg. agricultural, dryland wheat. Dominant herb/ grass sp. couch, bermuda. Population abundant, distribution patchy. Growth habit erect.

PI 636532. Festuca arundinacea Schreb.
Wild. T029.CPG94; W6 16003. Collected 06/22/1994 in Tunisia. Latitude 36° 46' 38" N. Longitude 9° 7' 58" E. Elevation 197 m. Near

Amdoun, 6 k west of Beja on C63. Grazed. Slope 0-5%, aspect E. Open. Soil clay, vertisol, pH 8.5+. Rainfall 625 mm. Seasonally inundated, stream terrace. Vegetation clsoed, seasonal tall grass. Surrounding veg. agri., dryland wheat. Dominant herb/grass sp. couch, bermuda. Population abundance frequent, distribution patchy. Growth habit erect.

PI 636533. Festuca arundinacea Schreb.
Wild. T054.CPG94; W6 16028. Collected 06/24/1994 in Tunisia. Latitude 36° 57' 9" N. Longitude 8° 54' 4" E. Elevation 68 m. Near Ain Sobaa, 16 k east of Tabarka on Hw. P7. Grazed. Slope 0-5%, aspect N. Area open. Soil loam, pH 7.5-8.0. Rainfall 900 mm. Seasonally dry, alluvial fan. Vegetation closed, seasonal short grass. Surrounding veg. evergreen open forest with closed lower layers. Population abundance occasional, distribution patchy. Growth habit erect.

PI 636534. Phalaris aquatica L.
Wild. T060.CPG94; W6 16034. Collected 06/24/1994 in Tunisia. Latitude 37° 7' 15" N. Longitude 9° 15' 55" E. Elevation 99 m. Near Sedjnane, 8 k north of Sedjnane on road 66 to Cap Serrat. Grazed. Slope 0-5%, aspect S. Area open. Soil heavy clay, vertisol, pH 8.5. Rainfall 650 mm. Moist, stream terrace. Vegetation closed, seasonal tall grass. Surrounding veg. agriculture, dryland grain. Population abundance occasional, distribution patchy. Growth habit erect.

PI 636535. Dactylis glomerata L.
Wild. T063.CPG94; W6 16037. Collected 06/24/1994 in Tunisia. Latitude 37° 11' 45" N. Longitude 9° 35' 38" E. Elevation 5 m. Near Teskraia, 25.5 k west of Bizerte on Hw. C51. Grazed. Slope 0-5%, aspect S. Open. Soil heavy cracking vertisol near salt lake, some salt on surface, pH 8.5-9.0. Rainfall 600 mm. Seasonally flooded, floodplain. Vegetation closed,seasonal tall grass.Surrounding veg. agri., dryland wheat. Population abundance frequent, distributuion patchy. Growth habit erect.

The following were collected by Peter Cunningham, Dept. of Agriculture & Rural Affairs, Pastoral Research Institute, P.O. Box 180, Hamilton, Victoria 3300, Australia; Walter Graves, University of California Cooperative Ext. Service (retired), 7665 Volclay Drive, San Diego, California 92119-1219, United States; Abdelmajid Mezni, Tunisia. Received 08/19/1994.

PI 636536. Festuca arundinacea Schreb.
Wild. T093.CPG94; W6 16067. Collected 06/28/1994 in Tunisia. Latitude 36° 34' 27" N. Longitude 8° 41' 49" E. Elevation 290 m. Near Dar Hamra, 11.5 k north of Jendouba on P17 Hw. Grazed. Slope 0-5%, aspect S. Area open. Soil heavy clay, pH 9.0. Rainfall 600 mm. Moist, stream terrace. Vegetation closed, seasonal tall grass. Surrounding veg. dryland wheat. Population abundance frequent, distribution patchy. Growth habit erect.

The following were collected by Peter Cunningham, Dept. of Agriculture & Rural Affairs, Pastoral Research Institute, P.O. Box 180, Hamilton, Victoria 3300, Australia; Walter Graves, University of California Cooperative Ext. Service (retired), 7665 Volclay Drive, San Diego, California 92119-1219, United States; Leonardo Sulas, Sardinia, Italy. Received 08/19/1994.

PI 636537. Festuca arundinacea Schreb.
Wild. S063.CPG94; W6 16168. Collected 07/06/1994 in Sardinia, Italy. Latitude 40° 17' 27" N. Longitude 8° 56' 46" E. Elevation 255 m. 16 k east of Macomer on road SS129 to Nuoro, 1 k south on dirt road. Grazed. Slope 0-5%, aspect S. Area open. Soil loam, pH 6.0-6.5. Rainfall 755 mm. Moist, stream terrace. Vegetation closed, seasonal tall grass. Surrounding veg. seasonal short grass. Dominant herb/grass sp. couch, bermuda, tall fescue. Population abundance frequent, distribution patchy. Growth habit erect.

The following were collected by Peter Cunningham, Dept. of Agriculture & Rural Affairs, Pastoral Research Institute, P.O. Box 180, Hamilton, Victoria 3300, Australia; Walter Graves, University of California Cooperative Ext. Service (retired), 7665 Volclay Drive, San Diego, California 92119-1219, United States; Claudio Porqueddu, Sassari, Sardinia, Italy. Received 08/19/1994.

PI 636538. Lolium perenne L.
Wild. S074.CPG94; W6 16179. Collected 07/08/1994 in Sardinia, Italy. Latitude 39° 21' 6" N. Longitude 9° 20' 8" E. Elevation 592 m. 5 k south of Fonni off SP7 up toward Mt. Spada 1.5 k to east. Grazed. Slope 6-10%, aspect N. 1/2 shade. Soil loam, granitic rock, pH 5.0. Rainfall 900-1000 mm. Seasonally dry, lower slope. Vegetation closed, seasonal tall grass. Surrounding veg. evergreen open forest with closed lower layers. Population abundance occasional, distribution patchy. Growth habit semi-erect.

PI 636539. Lolium perenne L.
Wild. S084.CPG94; W6 16189. Collected 07/07/1994 in Sardinia, Italy. Latitude 39° 45' 44" N. Longitude 9° 29' 48" E. Elevation 690 m. 11 k south of Olassa on SSN 198, Olassa-Lerdasdefogu. Roadway. Slope 0-5%, aspect SE. Open. Soil loam, limestone rock, pH 8.5. Rainfall 840 mm. Seasonally dry, lower slope. Vegetation closed, open evergreen scrub with closed ground cover. Surrounding veg. seasonal short grass, pasture agri. Population abundance occasional, distribution patchy. Growth habit semi-erect.

PI 636540. Festuca arundinacea Schreb.
Wild. S090.CPG94; 136459; W6 16195. Collected 07/08/1994 in Sardinia, Italy. Latitude 39° 21' 28" N. Longitude 9° 31' 11" E. Elevation 8 m. 2 k west of San Priamo, road SSN 125, San Priamo-Cagliari. Past grazed, now roadway. Slope 0-5%, aspect E. Open. Soil sandy loam, pH 7.0. Rainfall 660 mm. Seasonally flooded, ravine, alluvial plain. Veg. closed, seasonal short grass. Surrounding veg. open evergreen scrub with closed ground cover. Population abundance rare, distribution patchy. Growth habit erect.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 1994.

PI 636541. Poa sp.
Wild. WJK94-T5; W6 16214. Collected 05/28/1994 in Turkey. Ihlara Valley in Aksaray Province.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Donated by Ismail Kusmenoglu, Central Research Inst. of Field Crops, Ministry of Agriculture, P.O. Box 226, Ulus, Ankara 06042, Turkey. Received 1994.

PI 636542. Lens culinaris Medik. **subsp. culinaris**
Wild. WJK94-T28; W6 16237; Kayi 91. Collected 06/1994 in Turkey. A large yellow cotyledon line developed by the Transitional Zone Research Institute, Eskisehir, Turkey.

The following were collected by Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Nicolay Portinier, Kamorov Institute of Botany, St. Petersburg, Leningrad, Russian Federation; Nicolay Khitrov, Dokvchaev Soil Institute, Pygevsky, per., 7., Moscow, Moscow 109017, Russian Federation. Received 01/1996.

PI 636543. Festuca pratensis Huds.
Wild. VIR D34; W6 17806. Collected 07/20/1995 in Russian Federation. Latitude 44° 21' 24" N. Longitude 40° 43' 30" E. Elevation 450 m. pH 5.8.

PI 636544. Astragalus glycyphyllos L.
Wild. VIR D71; W6 17817. Collected 07/31/1995 in Russian Federation. Latitude 44° 39' 6" N. Longitude 40° 37' 47" E. Elevation 200 m. pH 7.

The following were collected by Walter Graves, University of California Cooperative Ext. Service (retired), 7665 Volclay Drive, San Diego, California 92119-1219, United States; Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Melvin Rumbaugh, R.R. 3, Box 125, Humboldt, Nebraska 68376, United States; Nicolay Portinier, Kamorov Institute of Botany, St. Petersburg, Leningrad, Russian Federation; Jay Hart, 20 Bush Lane, Ithaca, New York 14850, United States; Nicolay Khitrov, Dokvchaev Soil Institute, Pygevsky, per., 7., Moscow, Moscow 109017, Russian Federation. Received 01/1996.

PI 636545. Trisetum spicatum (L.) K. Richt.
Wild. 0025; VIR 190; US 25; W6 17827. Collected 08/31/1995 in Russian Federation. Latitude 44° 3' 5" N. Longitude 40° 1' 22" E. Elevation 1900 m. Area grazed. Slope 11-40%, aspect N. Light open. Soil loam, pH 7.5. Seasonally dry, limestone rock outcrop. Vegetation closed. Population distribution patchy, abundance frequent to occasional. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 636546. Dactylis glomerata L.
Wild. 0054; VIR 172B; US 54; W6 17838. Collected 08/31/1995 in Russian Federation. Latitude 43° 55' 1" N. Longitude 40° 15' 39" E. Elevation 2000 m. In the vicinity of town of Maykop. 16.5 km. southeast

of Goozeripl'. Previously grazed, now deferred. Slope 11-40%, aspect SW. Light open. Soil loam with gravel, pH 4.6. Moist, mid slope. Vegetation closed, evergreen tall grass. Surrounding vegetation evergreen and deciduous forest with closed lower layers. Dominant tree species Betula sp., Abies sp., Acer sp., Fagus sp. Dominant shrub species Laurocerasus sp., Rhododendron sp. Dominant herb/grass species mainly high meadow grasses, Calamagrostis sp., Agrostis sp. Population distribution patchy, abundance occasional. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 636547. Dactylis glomerata L.
Wild. 0091; VIR 248; US 91; W6 17847. Collected 09/06/1995 in Russian Federation. Latitude 43° 43' 9" N. Longitude 41° 35' 45" E. Elevation 1200 m. Cherkessk-Karachayeysk Republic, 8 km. south of Marvkha. Area grazed/hayed. Slope 6-10%, aspect SW. Light open. Soil clay, pH 5.0-5.3. Moist to seasonally dry, ridgetop, upper slope. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Alnus i., Corealus a. Dominant shrub species Rhododendron sp., Rosa sp., Ribes sp. Dominant herb/grass species Trifolium sp., Lotus c., Achellea sp., Dandelion, Deschampsia c., Phleum p., Dactylis g., Agrostis sp., Calamagrostis sp. Population distribution patchy, abundance frequent. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 636548. Dactylis glomerata L.
Wild. 0109; VIR 265B; US 109; W6 17851. Collected 09/08/1995 in Russian Federation. Latitude 43° 26' 29" N. Longitude 41° 42' 21" E. Elevation 2150 m. Karachayevo-Cherkesskaya Republic, 6 km. west of Teberda. Area deferred. Slope 11-40%, aspect E. Light open, Soil loam with gravel, pH 4.8-5.5. Moist, mid slope. Vegetation closed, evergreen tall grass and broad-leafed herb vegetation. Surrounding vegetation evergreen and deciduous forest with closed lower layers. Dominant tree species Betula sp., Pinus sp. Dominant shrub species Rhododendron sp., Juniperus sp. Dominant herb/grass species Trifolium sp., Alchimilla sp., Festuca sp., Dactylis g. Population distribution patchy, abundance occasional. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 636549. Dactylis glomerata L.
Wild. 0114; VIR 269B; US 114; W6 17853. Collected 09/09/1995 in Russian Federation. Latitude 43° 15' 15" N. Longitude 41° 49' 43" E. Elevation 2050 m. Karachayevo-Cherkesskaya Republic, 30 km southeast of Teberda near Klukhor Pass to Georgia. Past grazed, now roadway. Slope 6-10%, aspect SW. Light 1/4 shade. Soil loam, pH 5.7-6.1. Seasonally dry, upper slope, rock outcrop. Vegetation closed, evergreen and deciduous open forest with closed lower layers. Surrounding vegetation evergreen tall grass and broad-leafed herb vegetation. Dominant tree species Pinus sp., Abies sp., Picea sp., Betula sp. Dominant shrub species Juniperus sp., Rhododendron sp. Dominant herb/grass species Achellea sp., Achimilla sp., Trifolium sp., Vicia sp., Lotus c.,

Hedysarum h., Agrostis sp., Calamagrostis sp., Phleum p., Dactylis g., Festuca sp., Deschampsia c. Population distribution patchy, abundance frequent. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 636550. Dactylis glomerata L.
Wild. 0135; VIR 267; US 135; W6 17861. Collected 09/07/1995 in Russian Federation. Latitude 43° 28' 27" N. Longitude 41° 40' 54" E. Elevation 1800 m. Karachayevo-Cherkesskaya Republic, 8 km. west of Teberda. Past logged, now grazed. Slope 41-60%, aspect S. Light 3/4 to shaded. Soil loam, pH 5.7-6.0. Seasonally dry, lower-mid slope. Vegetation closed, evergreen open forest with closed lower layers. Surrounding vegetation same. Dominant tree species Pinus s., Hamata on S. slope, Abies n., Picea o., on N. slope. Dominant shrub species Juniperus oblonga, Rosa sp., Ribes sp. Dominant herb/grass species Achellea sp., Trifolium sp., Coronilla sp., Lotus c., Deschampsia c., Festuca sp., Agrostis sp., Calamagrostis. Population distribution patchy, abundance frequent. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 636551. Dactylis glomerata L.
Wild. 0136; VIR 268; US 136; W6 17862. Collected 09/07/1995 in Russian Federation. Latitude 43° 28' 27" N. Longitude 41° 40' 54" E. Elevation 1800 m. Karachayevo-Cherkesskaya Republic, 8 km. west of Teberda. Past logged, now grazed. Slope 41-60%, aspect S. Light 3/4 to shaded. Soil loam, pH 5.7-6.0. Seasonally dry, lower-mid slope. Vegetation closed, evergreen open forest with closed lower layers. Surrounding vegetation same. Dominant tree species Pinus s., Hamata on S. slope, Abies n., Picea o. on N. slope. Dominant shrub species Juniperus oblonga, Rosa sp., Ribes sp. Dominant herb/grass species Achellea sp., Trifolium sp., Coronilla sp., Lotus c., Deschampsia c., Festuca sp., Agrostis sp., Calamagrostis. Population distribution patchy, abundance frequent. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 636552. Onobrychis inermis Steven
Wild. 0182; VIR 036; US 182; W6 17867. Collected 07/23/1995 in Russian Federation. Latitude 44° 17' 4" N. Longitude 41° 18' 25" E. Elevation 800 m. Southeast of Maykop, 5 km. northwest of Spokoynaya. Previously grazed, now roadway. Slope 0-5%, aspect N. Light open. Soil clay with 60% gravel, pH 7. Seasonally dry, ridgetop. Vegetation closed, evergreen short grass. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Quercus robur. Dominant shrub species Carpinus c., Q. petraea. Population distribution patchy, abundance frequent. Growth habit semi-erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

The following were collected by Max E. Patterson, Washington State University, Department of Horticulture and Landscape Architecture, Rm 149

Johnson Hall, Pullman, Washington 99164-6414, United States. Received 05/13/1996.

PI 636553. Lens culinaris Medik. **subsp. culinaris**
Cultivated. MP-10; W6 17942. Collected 05/05/1996 in Nevsehir, Turkey. Insufficiant data - RW.

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 05/1995.

PI 636554. Achnatherum splendens (Trin.) Nevski
Wild. E94062; W6 18022. Collected 09/1994 in Mongolia. Latitude 45° 48' 12" N. Longitude 111° 12' 56" E. Elevation 1006 m. At Sum center. Species collected from waste ground within Sum boundaries. Desert steppe. Soils shallow, gravelly, common to desert steppe. Aspect and slope horizontal.

PI 636555. Aconogonon divaricatum (L.) Nakai
Wild. W94025; W6 18180. Collected 09/1994 in Mongolia. Latitude 50° 4' 20" N. Longitude 106° 5' 27" E. Elevation 899 m. West of Orhon River and Shaamar, at point where road tops the west tableland. Mountain steppe. Rolling, 2% east slope. Appears burned over.

PI 636556. Onobrychis arenaria subsp. sibirica (Sirj.) P. W. Ball
Wild. W94068; W6 18217. Collected 09/1994 in Mongolia. Latitude 49° 14' 37" N. Longitude 104° 33' 40" E. Elevation 1509 m. High mountain valley, about 135 km SW of Dzuunburen by air. Mountain steppe. South slope 5-10%.

PI 636557. Bromus inermis Leyss. **subsp. inermis**
Wild. W94073; W6 18222. Collected 09/1994 in Mongolia. Latitude 48° 56' N. Longitude 102° 49' 14" E. Elevation 1579 m. About 70 km NW of Bulgan. East edge of wide valley. Near tree line on east. Mountain steppe. West slope 5%.

The following were collected by Daniel Taub, State University of New York, Dept. of Ecology & Evolution, Stony Brook, New York 11794, United States. Received 12/09/1996.

PI 636558. Poa pratensis L.
Wild. 94-11; 95-26; W6 19117. Collected 08/01/1994 in New York, United States. Latitude 40° 51' 50" N. Longitude 72° 51' 5" W. In a successional old field located in Brookhaven National Laboratory, Upton, New York.

PI 636559. Deschampsia flexuosa (L.) Trin.
Wild. 95-22; W6 19121. Collected 07/08/1995 in New York, United States. Latitude 40° 57' N. Longitude 73° 8' 40" W. Near village of Old Field. On sandy escarpment along a beach. Rather open tree canopy.

The following were collected by Robert J. Soreng, Cornell University, L. H. Bailey Hortorium, 462 Mann Library, Ithaca, New York 14853-4301, United States. Received 02/10/1997.

PI 636560. Dactylis glomerata L.
Wild. 4002; W6 19176. Collected 06/30/1993 in Aude, France. Latitude 43° 25' N. Longitude 2° 15' E. Elevation 200 m. 20 km northwest of Carcassonne, south base of Montagne Noire. Mediterranean shrub, grass and live oak vegetaion. Quercus coccifera, Q. ilex, Buxus, Thymus. Shallow soils over gently south sloping (5%) limestone outcrop. Occasional to common.

The following were collected by Jerrold I. Davis, Cornell University, L. H. Bailey Hortorium, 462 Mann Library, Ithaca, New York 14853-4301, United States; Robert J. Soreng, Cornell University, L. H. Bailey Hortorium, 462 Mann Library, Ithaca, New York 14853-4301, United States; K. Guney, Ankara University, Ankara, Ankara, Turkey; U. Bingol, Ankara University, Ankara, Ankara, Turkey. Received 02/10/1997.

PI 636561. Puccinellia intermedia (Schur) Janch.
Wild. 4086b; W6 19194. Collected 07/16/1993 in Ankara, Turkey. Latitude 38° 45' N. Longitude 33° 33' E. Elevation 905 m. 50 km north of Aksaray, near junction of Routes 300 and E90, on Route E90 toward Ankara, shore of Tuz Golu. Shores of vast shallow very saline lake surrounded by steppe. Heavy clay soils. In margins of lake bed, where soils remain wet into summer.

PI 636562. Amblyopyrum muticum (Boiss.) Eig
Wild. 4095; W6 19200. Collected 07/16/1993 in Nigde, Turkey. Latitude 38° 2' N. Longitude 34° 10' E. Elevation 1340 m. South slopes of Hasan Dag, 50 km south of Aksaray on Route E90 and east of 15 km east of E90 on road to Bor. Very rocky (lavas), south facing slopes, heavily grazed, loamy soils, near gypsum quarry, open steppe below forests.

PI 636563. Koeleria lobata (M. Bieb.) Roem. & Schult.
Wild. 4146; W6 19220. Collected 07/22/1993 in Denizli, Turkey. Latitude 38° 14' N. Longitude 29° 59' E. Elevation 854 m. Above Isikli Golu, along Route 625 between Cinar and Civril, just west of Gumussu. South facing, gravely, limestone, footslopes (30% slope), above lake. Among copses of Quercus coccifera 4148, Pistacea, Pyrus, with Chrysopogon, Stipa bromoides, Globularia 4149.

The following were collected by Robert J. Soreng, Cornell University, L. H. Bailey Hortorium, 462 Mann Library, Ithaca, New York 14853-4301, United States; K. Guney, Ankara University, Ankara, Ankara, Turkey. Received 02/10/1997.

PI 636564. Briza media L.
Wild. 4174; W6 19231. Collected 07/28/1993 in Kastamonu, Turkey. Latitude 41° 31' N. Longitude 33° 43' E. Elevation 1066 m. 11 km north of Kastamonu on Highway 765 to Inebolu, just south of Oyrak Gec [pass]. Shrubby steppe grass formation, with Juniperus oxycedrus, Cretaegus, Malus, Rosa, Berberis, and scattered Pinus nigra, spiny Astrgalus. East exposure, 20% slopes, low, heavily grazed hills. Limestone.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 07/28/1996.

PI 636565. Genista sp.
Wild. B96-137; W6 19329. Collected 07/1996 in Bulgaria. Latitude 41° 59' 37" N. Longitude 24° 50' 18" E. Elevation 760 m. 0.5km southwest of town, Lascovo. South.

PI 636566. Koeleria macrantha (Ledeb.) Schult.
Wild. B96-201; W6 19381. Collected 07/1996 in Bulgaria. Latitude 41° 35' 33" N. Longitude 24° 22' 46" E. Elevation 1186 m. Cultivated area near river outside of Tirgrad, near border to Greece. Northwest.

PI 636567. Festuca ovina L.
Wild. B96-261; W6 19423. Collected 07/1996 in Bulgaria. Latitude 42° 44' 15" N. Longitude 24° 37' 10" E. Elevation 1064 m. Balkan Mountains. Steep rocky bank. Trifolium, Lotus, Fagus.

PI 636568. Festuca pratensis Huds.
Wild. B96-266; W6 19427. Collected 07/1996 in Bulgaria. Latitude 42° 48' 32" N. Longitude 24° 38' E. Elevation 1064 m. North (just over ridge) side of Balkans. In beech (Fagus) forest. North.

PI 636569. Briza media L.
Wild. B96-289; W6 19442. Collected 07/1996 in Bulgaria. Latitude 42° 49' 2" N. Longitude 24° 56' 6" E. Elevation 547 m. Meadow near large raspberry patch. Southwest.

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 03/06/1997.

PI 636570. Alopecurus brachystachyus M. Bieb.
Wild. 96S-90; W6 19614. Collected 09/1996 in Mongolia. Latitude 46° 6' 44" N. Longitude 91° 33' 16" E. Elevation 1213 m. Khovd Aimag, Bulgan Sum, an experimental area about 1 km from the sum center. 0% slope. Outwash plain in desert steppe that has been fenced for 30 years as an experimental crop area. Flood irrigation is used. Soils are coarse, recent river alluvium with coarse sandy brown soils. DOMINANT VEG: Experimental area currently being harvested for hay. Associated species other than species collected were crab apple and sea buckthorn.

PI 636571. Festuca lenensis Drobow
Wild. 96N-188; W6 19682. Collected 08/1996 in Mongolia. Latitude 48° 18' 11" N. Longitude 98° 55' 38" E. Elevation 2464 m. Southwest aspect on north side of pass. 15% slope. Located mid-slope on a small creek. Vegetation is grass slope with intermixed larch, some rocks. Soil is light brown. Good colonizing species. DOMINANT VEG: Carex pediformis, Stipa baicalensis, Poa pratensis, Festuca lenensis, Festuca sibirica ECOLOGICAL ZONE: Mountain meadow steppe.

PI 636572. Agrostis vinealis subsp. trinii (Turcz.) Tzvelev
Wild. 96N-221; W6 19713. Collected 08/1996 in Mongolia. Latitude 48° 57' 29" N. Longitude 96° 45' 53" E. Elevation 1863 m. Oygon Nuur is 23 km northwest and Telmsen Nuur is 29 km southeast. Site is a large grassy flat surrounded by hills with patches of timber. Soils are coarse. Slope and flat meadow being cut for winter forage. DOMINANT VEG: Leymus chinensis, Hordeum brevisubulatum, Poa substigata, Carex pediformis ECOLOGICAL ZONE: Forest steppe.

PI 636573. Poa pratensis L.
Wild. 96N-245; W6 19735. Collected 08/1996 in Mongolia. Latitude 49° 18' 13" N. Longitude 94° 30' 42" E. Elevation 2125 m. 5% slope. East aspect hillside just below the Larix timber. Road is below the site. Soils are almost white in color and appear to be fine texture. Normally a wet meadow area, but dry this year. DOMINANT VEG: Agrostis trinii, Carex pediformis, Poa pratensis, Koelaria glauca. ECOLOGICAL ZONE: Forest steppe.

PI 636574. Leymus salina (M. E. Jones) A. Love **subsp. salina**
Wild. 96N-279; W6 19765. Collected 08/1996 in Mongolia. Latitude 49° 55' 26" N. Longitude 93° 47' E. Uvs Aimag, on bench 2.5 km north of Dzel. 1% to 2% west slope. Soils are sand. The road has just topped out. DOMINANT VEG: Caragana bungei, Cleistogenes squarrosa, Carex duriscula, Agropyron desertorum, Potentilla acaulis, Potentilla biforca, Allium odorum. ECOLOGICAL ZONE: Steppe.

PI 636575. Leymus paboanus (Claus) Pilg.
Wild. 96N-286; W6 19771. Collected 08/1996 in Mongolia. Latitude 50° 29' 59" N. Longitude 93° 35' 48" E. Elevation 924 m. Uvs Aimag, mixed sand hill/marsh 1.5 km north of Tooromi. Soils is sand. Used extensively for wintering animals. DOMINANT VEG: Achnatherum splendens, Allium mongolicum, Thermompsis spp., Sophora aralsca, Astragalus adsurgens, Elymus strigosa, Cleistogenes squarrosa. ECOLOGICAL ZONE: Steppe.

PI 636576. Bromus inermis Leyss. **subsp. inermis**
Wild. 96N-290; W6 19773. Collected 08/1996 in Mongolia. Latitude 49° 49' 32" N. Longitude 92° 3' 48" E. Elevation 1141 m. Uvs Aimag, 16 km south of Ulaangom and 13 km northeast of Harhiraa. 1% to 2% east-northeast slope. Alfalfa field that was abandoned three years ago. Soils are sandy with coarse aggregate. DOMINANT VEG: Medicago falcata, Bromus inermis, Artemisia frigida, Cleistogenes squarrosa, Stipa capillata. ECOLOGICAL ZONE: Steppe.

PI 636577. Pseudoroegneria strigosa subsp. aegilopoides (Drobow) A. Love
Wild. 96N-292; W6 19775. Collected 08/1996 in Mongolia. Latitude 49° 46' 38" N. Longitude 91° 51' 12" E. Elevation 1570 m. Uvs Aimag, 3.2 km west of Harhiraa and about 2 km up river from the headgate for Harhiraa irrigation diversion. Steep south hillside above a fast running river with alluvial banks and mud debris on the bottom with some trees. DOMINANT VEG: Elymus sp., Allium sp., Agropyron cristatum. ECOLOGICAL ZONE: Mountain steppe.

PI 636578. Bromus inermis Leyss. **subsp. inermis**
Wild. 96N-294; W6 19777. Collected 08/1996 in Mongolia. Latitude 49° 46' 40" N. Longitude 91° 53' 52" E. Elevation 1463 m. Uvs Aimag, in

the city park in Harhiraa, sum center for Tarialan. 1% east slope. Gravelly, sandy soil. DOMINANT VEG: Medicago falcata, Bromus inermis, Agrostis clavata. ECOLOGICAL ZONE: Steppe.

The following were collected by T.A. Campbell, USDA-ARS, Germplasm Quality and Enhancement Lab, Building 001, Room 339, Beltsville, Maryland 20705, United States; John D. Berdahl, USDA-ARS, Northern Great Plains Research Lab., P.O. Box 459, Mandan, North Dakota 58554, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Larry K. Holzworth, USDA-NRCS State Office, Federal Bldg., Room 443, 10 E. Babcock, Bozeman, Montana 59715-4704, United States. Received 12/1997.

PI 636579. Bromus inermis Leyss. **subsp. inermis**
Cultivated. X97-047; W6 20231. Collected 08/1997 in Xinjiang, China. Latitude 43° 6' 33" N. Longitude 80° 52' 1" E. Elevation 1950 m. 12 km north of Farm No. 77, 38 km west of Zhaosu County, Xinjiang. Seeded hay field, established in 1989. Silt loam soil. Silt loam soil with a sandy ridge. Slope is 2% with south aspect.

PI 636580. Bromus inermis Leyss. **subsp. inermis**
Wild. X97-063; W6 20242. Collected 08/1997 in Xinjiang, China. Latitude 42° 53' 53" N. Longitude 81° 5' 36" E. Elevation 1680 m. 30 km south of Zhaosu County, Xinjiang. Populus tree rows (3-10 m tall) alongside road. Disturbed soil. Clay loam with stones 2 cm to 15 cm diameter. No slope; irrigated.

PI 636581. Dactylis glomerata L.
Wild. X97-103; W6 20267. Collected 08/1997 in Xinjiang, China. Latitude 43° 20' 31" N. Longitude 81° 49' 1" E. Elevation 1710 m. 20 km north of Tekes County, Xinjiang. Ungrazed hillside with failed evergreen tree planting on pass through mountains. Silt loam soil. Moderately dense vegetation with a high proportion of forbs. Slope is 20% with north to northwest aspect.

PI 636582. Dactylis glomerata L.
Wild. X97-117; W6 20276. Collected 08/1997 in Xinjiang, China. Latitude 44° 13' 10" N. Longitude 81° 9' 30" E. Elevation 990 m. 45 km northeast of Huocheng County, Xinjiang. Hay meadow next to mountain-fed stream. Ungrazed, will be cut for hay. Clay loam soil. No slope.

PI 636583. Bromus inermis Leyss. **subsp. inermis**
Wild. X97-130; W6 20287. Collected 08/1997 in Xinjiang, China. Latitude 43° 28' 4" N. Longitude 81° 6' 38" E. Elevation 2040 m. 55 km south of Yili City, Xinjiang. Dry hillside, stony soil, grazed moderately. Slope is 30% with south to southeast aspect.

PI 636584. Poa versicolor subsp. relaxa (Ovcz.) Tzvelev
Wild. X97-134; W6 20289. Collected 08/1997 in Xinjiang, China. Latitude 43° 28' 4" N. Longitude 81° 6' 38" E. Elevation 2040 m. 55 km south of Yili City, Xinjiang. Dry hillside, stony soil, grazed moderately. Slope is 30% with south to southeast aspect.

PI 636585. Dactylis glomerata L.
Wild. X97-144; W6 20295. Collected 08/1997 in Xinjiang, China. Latitude 43° 27' 28" N. Longitude 81° 5' 31" E. Elevation 2160 m. 58 km south of Yili

City, Xinjiang. Hillside with lush vegetation, moderately grazed, will be cut for hay. Silt loam soil. Slope is 25% with north aspect.

PI 636586. Phleum phleoides (L.) H. Karst.
Wild. X97-145; W6 20296. Collected 08/1997 in Xinjiang, China. Latitude 43° 27' 28" N. Longitude 81° 5' 31" E. Elevation 2160 m. 58 km south of Yili City, Xinjiang. Hillside with lush vegetation, moderately grazed, will be cut for hay. Silt loam soil. Slope is 25% with north aspect.

The following were collected by Warren M. Williams, AgResearch, Grasslands Research Centre, Grasslands Research Centre, Fritzherbert West, Private Bags 11008, Palmerston North, North Island, New Zealand; Alan V. Stewart, Pyne Gould Guinness Ltd., P.O. Box 3100, 411 Blenheim Road, Christchurch, South Island 8015, New Zealand. Received 01/1998.

PI 636587. Festuca rubra L.
Uncertain. C106; W6 20341. Collected 07/1997 in California, United States. Latitude 38° 37' 36" N. Longitude 123° 23' 3" W. Elevation 28 m. Salt Point. Two miles north of Salt Point State Park. Roadway/Seaside meadow. Sand/Loam. Slope 0-5%. Open. Seasonally dry. Cliff/Upper slope.

PI 636588. Dactylis glomerata L.
Uncertain. C112; W6 20343. Collected 07/1997 in California, United States. Point Arena. Two miles south of Point Arena on Hwy. 1. Grazed/Roadway. Sand/Loam. Slope 0-5%. Open. Seasonally dry.

PI 636589. Dactylis glomerata L.
Uncertain. C132; W6 20356. Collected 08/1997 in California, United States. Elevation 0 m. Adjacent to school ground fenceline in town of Loleta. Ungrazed settlement. Loam, 0-5% slope, seasonally dry, open, plateau.

PI 636590. Lolium rigidum Gaudin
Wild. C161; W6 20373. Collected 08/1997 in California, United States. Latitude 41° 58' 7" N. Longitude 124° 12' 14" W. Elevation 20 m. On coast north of the town of Smith River on Highway 101. Hay field, transition from dunes to alluvial fan. Sand, 0-5% slope, open.

PI 636591. Festuca arundinacea Schreb.
Uncertain. OR23; W6 20389. Collected 08/1997 in Oregon, United States. Latitude 43° 32' 33" N. Longitude 124° 9' 20" W. Elevation 89 m. Templeton Valley at bridge, lower paddock (of two). From Hauser, 8 miles up the road to Templeton. Grazed, loam, 0-5% slope, open, seasonally dry, stream terrace. Recently sown with canarygrass and birdsfoot trefoil. Sampled near the fencelines.

PI 636592. Dactylis glomerata L.
Uncertain. OR99; W6 20440. Collected 08/1997 in Oregon, United States. Latitude 45° 19' 40" N. Longitude 123° 52' 25" W. Elevation 100 m. 2 miles west of town of Hemlock at West Beaver. Stream terrace, rough grazed field. Loam, 0-5% slope, open, moist/seasonally dry.

PI 636593. Dactylis glomerata L.
Wild. OR101; W6 20444. Collected 08/1997 in Oregon, United States. Elevation 170 m. Cape Foulweather, adjacent to lookout on clifftop. Exposed coastal clifftop, ungrazed, upperslope. Loam, 0-5% slope, open, moist.

PI 636594. Dactylis glomerata L.
Wild. W2; W6 20462. Collected 08/1997 in Washington, United States. Elevation 2 m. Near town of Long Beach. Beach dunes at Sea View. Sand dunes, 6-10% slope, open.

PI 636595. Dactylis glomerata L.
Uncertain. W6; W6 20466. Collected 08/1997 in Washington, United States. Elevation 10 m. Lake Loomis. Parking area at lakeside, semishaded. Lower slope, 0-5% slope, quarter shade, moist.

PI 636596. Festuca arundinacea Schreb.
Uncertain. W25; W6 20478. Collected 08/1997 in Washington, United States. Latitude 47° 3' 29" N. Longitude 124° 0' 9" W. Elevation 20 m. Town of Copalis Crossing. Seward Nursery. Ungrazed grassland (old orchard). Loam, 0-5% slope, open, moist.

PI 636597. Festuca arundinacea Schreb.
Wild. W41; W6 20483. Collected 08/1997 in Washington, United States. Latitude 48° 10' 59" N. Longitude 124° 13' 2" W. Elevation 50 m. Highway 113, 8 miles north of Sappho. Grassy clearing in logged forest. Loam, 0-5%, open, moist.

PI 636598. Festuca arundinacea Schreb.
Wild. W50; W6 20487. Collected 08/1997 in Washington, United States. Latitude 48° 18' 12" N. Longitude 124° 25' 28" W. Elevation 2 m. West of Hoko river, Chico Bay Beach. Dune/upper slope. Saline soil, roots in sea water spray. Rocky beach front, moist.

The following were collected by Charles West, University of Arkansas, Altheimer Laboratory-Agronomy, 276 Altheimer Drive, Fayetteville, Arkansas 72703, United States. Received 12/1997.

PI 636599. Festuca arundinacea Schreb.
Wild. 93077; W6 20573. Collected 07/1993 in France. Latitude 42° 34' N. Longitude 2° 23' E. Elevation 500 m. 10 km S of Vernet Les Bains on N116 in the province of Roussillon.

PI 636600. Festuca arundinacea Schreb.
Wild. 93078; W6 20574. Collected 07/1993 in France. Latitude 42° 32' N. Longitude 2° 16' E. Elevation 600 m. 5 km S of Olette in the province of Roussillon.

PI 636601. Festuca arundinacea Schreb.
Wild. 93079; W6 20575. Collected 07/1993 in France. Latitude 42° 45' N. Longitude 2° 41' E. Elevation 150 m. 3 km S of Estagel on Hwy 612 in the province of Roussillon.

PI 636602. Festuca arundinacea Schreb.
Wild. 93080; W6 20576. Collected 07/1993 in France. Latitude 42° 48' N. Longitude 2° 30' E. Elevation 300 m. 3 km S of Saint Paul de Fenouillet in the province of Roussillon.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington

99164-6402, United States. Received 06/1998.

PI 636603. Lolium sp.
Uncertain. S98-29; W6 20751. Collected 04/1998 in Cordoba, Spain. Elevation 110 m. At the Escuela Tecnica Superior de Ingenieros Agronomos y de Montes, Universidad de Cordoba.

PI 636604. Lolium sp.
Uncertain. S98-30; W6 20752. Collected 04/1998 in Cordoba, Spain. Elevation 110 m. At the Escuela Tecnica Superior de Ingenieros Agronomos y de Montes, Universidad.

The following were collected by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 09/1998.

PI 636605. Nassella viridula (Trin.) Barkworth
Wild. T-888; W6 20888. Collected in Colorado, United States. Latitude 38° 27' N. Longitude 107° 21' W. 2.5 miles west of Highway 92 and Highway 50 junction on Highway 92 in Gunnison County.

PI 636606. Nassella viridula (Trin.) Barkworth
Wild. T-915; W6 20891. Collected in Alberta, Canada. Oldman Dam.

PI 636607. Nassella viridula (Trin.) Barkworth
Wild. T-916; W6 20892. Collected in Alberta, Canada. Latitude 49° 43' N. Longitude 112° 58' W. Highway 3A north of Lethbridge.

PI 636608. Nassella viridula (Trin.) Barkworth
Wild. T-919; W6 20893. Collected in Alberta, Canada. Latitude 49° 49' N. Longitude 112° 10' W. North of Taber, across Oldman River from Taber Provincial Park.

PI 636609. Nassella viridula (Trin.) Barkworth
Wild. T-922; W6 20894. Collected in Alberta, Canada. Latitude 50° 15' N. Longitude 112° 5' W. 1 mile south of Bow River on Highway 36.

PI 636610. Nassella viridula (Trin.) Barkworth
Wild. T-924; W6 20896. Collected in Alberta, Canada. Latitude 52° 8' N. Longitude 111° 54' W. 3 km west of Highway 36 on Highway 565 at Bull Pound Creek.

PI 636611. Pseudoroegneria spicata (Pursh) A. Love
Wild. T-914; W6 20912. Collected in Alberta, Canada. Oldman Dam.

PI 636612. Leymus cinereus (Scribn. & Merr.) A. Love
Wild. T-1013; W6 20960. Collected in Washington, United States. East edge of town of Lind in Adams County.

The following were collected by Dennis P. Sheehy, 69086 Allen Canyon Road, Wallowa, Oregon 97885, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Mark E. Majerus, USDA-NRCS, Plant Materials Center, Rt. 2, Box 1189, Bridger, Montana 59014-9718, United States; Susan R. Winslow,

USDA-NRCS, Bridger PMC, Route 2, Box 1189, Bridger, Montana 59014-9718, United States. Received 05/05/1999.

PI 636613. Agropyron cristatum var. pectinatum (M. Bieb.) Tzvelev
Wild. 98HT-180; W6 21269. Collected 09/1998 in Mongolia. Latitude 48° 39' 50" N. Longitude 110° 13' 22" E. Elevation 1280 m. Batchirrit Sum, Henti Aimag. Saddle pass where the road crosses from one sub-watershed of small tributary of the Onon River. Larix forest covers both sides of the pass except for a small area of forest opening on an east aspect. Soils mainly rock fragments and gravel. Associated vegetation: forest steppe. Trees are scattered with well-developed herbaceous understory of Elymus, Agropyron, Stipa, Potentilla, and Astragalus.

PI 636614. Bromus inermis Leyss. **subsp. inermis**
Wild. 98HT-193; W6 21280. Collected 09/1998 in Mongolia. Latitude 48° 29' 26" N. Longitude 110° 22' 25" E. Elevation 1097 m. Binder Sum, Henti Aimag. Gently rolling terrain in the Hurchin Gol Valley on east side of small, dry creek. Soils are stoney and well drained. Associated vegetation: Typical grass steppe vegetation dominated by Caragana shrubs, Leymus, Allium, Medicago, and Lespedeza.

PI 636615. Bromus inermis Leyss. **subsp. inermis**
Wild. 98HT-258; W6 21332. Collected 09/1998 in Mongolia. Latitude 48° 57' 9" N. Longitude 111° 3' 10" E. Elevation 1036 m. Daduul Sum, Henti Aimag. Slope above valley floor. The entire area appears to have burned the previous year. Associated vegetation: Dominated by forbs released by the burn. Stipa and Bromus found on mounds. Astragalus and Melilotus are present but seeds have already been dispersed.

PI 636616. Agropyron cristatum (L.) Gaertn.
Wild. 98HT-299; W6 21368. Collected 09/1998 in Mongolia. Latitude 48° 19' 1" N. Longitude 110° 1' 4" E. Elevation 1219 m. Daduul Sum, Henti Aimag. Both sides of a pass between two small stream drainages. Soils are very rocky and gravelly and formed from eroded granite. Associated vegetation: Forest steppe with high vegetation diversity in forest openings.

PI 636617. Agropyron cristatum (L.) Gaertn.
Wild. 98HV-3; W6 21387. Collected 09/1998 in Mongolia. Latitude 49° 45' 1" N. Longitude 106° 17' 27" E. Elevation 732 m. Bayankharaat Sum, Selenge Aimag, 51 km NE of Darkhan. native; between strips of abandoned wheat crop land; sandy, chestnut, brown soil. Associated vegetation: Leymus chinensis, Cleistogenes squarrosa, Astragalus melilotoides, Vicia amoena, Stipa sibirica.

PI 636618. Agropyron cristatum (L.) Gaertn.
Wild. 98HV-10; W6 21393. Collected 09/1998 in Mongolia. Latitude 49° 47' 43" N. Longitude 106° 23' 46" E. Elevation 762 m. Bayankharaat Sum, Selenge Aimag, West of Yoroo/4th Crop Brigade. Sandy, Chestnut, Light Brown soil on bench above Erool Gol Valley. Associated vegetation: Stipa baicalensis, Artemisia frigida, Cliestogenes squarrosa, Stipa sibirica, Koeleria macrantha, sub-dominant Caragana microphylla.

PI 636619. Alopecurus pratensis L.
Wild. 98HV-28; W6 21409. Collected 09/1998 in Mongolia. Latitude 49° 43' 59" N. Longitude 106° 45' 13" E. Elevation 732 m. Yoroo Sum; Selenge Aimag; East of Yoroo. Meadow Chernozem, lowlands in Eroo River

Valley. Associated vegetation: Agrostis mongolica, Hordeum brevisubulatum, Polygonum sibiricum, Saussurea sp.

PI 636620. Agropyron cristatum (L.) Gaertn.
Wild. 98HV-32; W6 21413. Collected 09/1998 in Mongolia. Latitude 49° 45' 58" N. Longitude 106° 57' 47" E. Elevation 762 m. Yoroo Sum; Selenge Aimag; 2nd Brigade Khanagait. Chernozem, dark brown soil. Associated vegetation: Elymus dahuricus, Geum aleppicum, Elymus gmelinii, Artemisia vulgaris, Geranium sibiricum.

PI 636621. Poa pratensis L.
Wild. 98HV-49; W6 21430. Collected 09/1998 in Mongolia. Latitude 49° 52' 30" N. Longitude 107° 43' 21" E. Elevation 762 m. Huder Sum, Selenge Aimag, 30 km east of Huder. meadow, dark brown soil, Uyalga River, wide open valley bordered by birch hills. Associated vegetation: Elytrigia gmelinii, Poa pratensis, Artemisia lucentica, Potentilla tanacetifolia, Leymus chinensis, Thalictrum simplex, T. minus .

PI 636622. Agropyron cristatum (L.) Gaertn.
Wild. 98HV-62; W6 21443. Collected 09/1998 in Mongolia. Latitude 49° 54' 32" N. Longitude 107° 24' 23" E. Elevation 762 m. Huder Sum, Selenge Aimag, 15 km west of Huder. Forb-Stipa site, dark brown meadow soil, base of south facing slope. Associated vegetation: Stipa baicalensis, Phlomis tuberosa, Medicago falcata, Artemisia dracunculis, Heteropappas biennis.

PI 636623. Phleum phleoides (L.) H. Karst.
Wild. 98HV-63; W6 21444. Collected 09/1998 in Mongolia. Latitude 49° 54' 32" N. Longitude 107° 24' 23" E. Elevation 762 m. Huder Sum, Selenge Aimag, 15 km west of Huder. Forb-Stipa site, dark brown meadow soil, base of south facing slope. Associated vegetation: Stipa baicalensis, Phlomis tuberosa, Medicago falcata, Artemisia dracunculis, Heteropappas biennis.

PI 636624. Agropyron cristatum (L.) Gaertn.
Wild. 98HV-174; W6 21549. Collected 09/1998 in Mongolia. Latitude 50° 34' 50" N. Longitude 100° 47' 29" E. Elevation 1494 m. Chandmanundur Sum, Hovsgol Aimag, 21 km west of Hohoo. Alluvial fan above small stream, forb-Leymus chinensis type, sandy light brown soil. Associated vegetation: Leymus chinensis, Artemisia dracunculus, Echonops latifolius, Astragalus mongolicus, Thermopsis lanceolata s.l. dahurica, Agropyron cristatum, Heteropappas biennis, Stipa krylovii, Poa botryoides.

PI 636625. Poa versicolor subsp. stepposa (Krylov) Tzvelev
Wild. 98HV-186; W6 21561. Collected 09/1998 in Mongolia. Latitude 50° 33' 48" N. Longitude 100° 35' 21" E. Elevation 1829 m. Chandmanundur Sum, Hovsgol Aimag, 39 km west of Hohoo. Top of small pass, larch forest understory, mountain light brown soil, mountain grass-forb understory type. Associated vegetation: Larix sibiricus, Agrostis trinii, Poa stepposa, Festuca ovina, Anemone sibiricus, Geranium pseudosibiricum, Vicia cracca, Delphinium elatum, Artemisia laciniata, Bromus pumpellianus, Artemisia integrifolia.

PI 636626. Puccinellia tenuiflora (Griseb.) Scribn. & Merr.
Wild. 98HV-200; W6 21575. Collected 09/1998 in Mongolia. Latitude

50° 16' 39" N. Longitude 100° 4' 56" E. Elevation 1692 m. Hovsgol Sum, Hovsgol Aimag, 21 km south of Hatgal. Narrow draw and associated gully heading up out of river bottom, light brown soil. Associated vegetation: Iris lactea, Elytrigia repens, Puccinellia tenuifolia-disturbed, Leymus chinensis-relatively pure stand.

PI 636627. Agropyron cristatum (L.) Gaertn.
Wild. 98HV-225; W6 21597. Collected 09/1998 in Mongolia. Latitude 50° 23' 56" N. Longitude 99° 17' 23" E. Elevation 1920 m. Ulaanuul Sum, Hovsgol Aimag, 5 km west Beltes Brigade. Narrow creek drainage, rocky south facing slope, sandy brown soil-rocky, forb-grass type. Associated vegetation: Agropyron cristatum, Leymus chinensis, Festuca lenensis, Astragalus austrosibiricus, Oxytropis nitens, O. pseudoglandulosa, Allium linare, Artemisia dracunculus, Artemisia frigida, Thermopsis lanceolata s.l., Rheum sp., Koeleria macrantha,.

The following were collected by Harold E. Bockelman, USDA, ARS, National Small Grains Collection, 1691 S 2700 W, Aberdeen, Idaho 83210, United States; Richard C. Johnson, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Roman Boguslavsky, National Centre for Plant Genetic Resources of Ukraine, Lab. for Introduction & Storage of Plant Genetic Resources, Yurjev Institute of Plant Production, Kharkiv, Kharkiv 61060, Ukraine; Vladislav Korzhenevsky, State Nikitsky Botanical Gardens, Department of Flora & Vegetation, Yalta, Krym 334267, Ukraine. Received 08/15/1999.

PI 636628. Melica ciliata L.
Wild. UKR-99-016; W6 21711. Collected 07/27/1999 in Krym, Ukraine. Latitude 44° 30' 39" N. Longitude 34° 14' E. Elevation 300 m. Near and around Nikita Botanical. South slope, rocky.

PI 636629. Dactylis glomerata L.
Wild. UKR-99-025; W6 21716. Collected 07/28/1999 in Krym, Ukraine. Latitude 44° 24' 39" N. Longitude 34° 0' 15" E. Elevation 195 m. Near Simeiz along road A-294. South slope, rocky, dry, highly diverse calcarous.

PI 636630. Brachypodium sylvaticum (Huds.) P. Beauv.
Wild. UKR-99-040; W6 21725. Collected 07/28/1999 in Krym, Ukraine. Latitude 44° 24' 15" N. Longitude 33° 49' 30" E. Elevation 230 m. Near Black Sea and Sanatome along road A-294. South slope, rocky, dry.

PI 636631. Dactylis glomerata L.
Wild. UKR-99-042; W6 21727. Collected 07/28/1999 in Krym, Ukraine. Latitude 44° 24' 15" N. Longitude 33° 49' 30" E. Elevation 230 m. Near Black Sea and Sanatome along road A-294. South slope, rocky, dry. Sparse stand, plants small.

PI 636632. Melica ciliata L.
Wild. UKR-99-048; W6 21732. Collected 07/28/1999 in Krym, Ukraine. Latitude 44° 24' 15" N. Longitude 33° 49' 30" E. Elevation 230 m. Near Black Sea and Sanatome along road A-294. South slope, rocky, dry.

PI 636633. Arrhenatherum elatius (L.) P. Beauv. ex J. Presl & C. Presl
Wild. UKR-99-052; W6 21736. Collected 07/29/1999 in Krym, Ukraine.

Latitude 44° 28' 49" N. Longitude 34° 2' 30" E. Elevation 1200 m. West of Yalta and near road A-296. Mostly flat, black soil, high plateau.

PI 636634. Briza media L.
Wild. UKR-99-053; W6 21737. Collected 07/29/1999 in Krym, Ukraine. Latitude 44° 28' 49" N. Longitude 34° 2' 30" E. Elevation 1200 m. West of Yalta and near road A-296. Mostly flat, black soil, high plateau.

PI 636635. Bromus riparius Rehmann
Wild. UKR-99-054; W6 21738. Collected 07/29/1999 in Krym, Ukraine. Latitude 44° 28' 49" N. Longitude 34° 2' 30" E. Elevation 1200 m. West of Yalta and near road A-296. Mostly flat, black soil, high plateau.

PI 636636. Poa compressa L.
Wild. UKR-99-073; W6 21750. Collected 07/30/1999 in Krym, Ukraine. Latitude 44° 32' 18" N. Longitude 33° 35' 59" E. Elevation 190 m. Along road A-294 to Sevastopol. Flat disturbed site. Watch for mix with Poa pratense.

PI 636637. Poa pratensis L.
Wild. UKR-99-074; W6 21751. Collected 07/30/1999 in Krym, Ukraine. Latitude 44° 32' 18" N. Longitude 33° 35' 59" E. Elevation 190 m. Along road A-294 to Sevastopol. Flat disturbed site.

PI 636638. Dactylis glomerata L.
Wild. UKR-99-097; W6 21763. Collected 07/30/1999 in Krym, Ukraine. Latitude 44° 30' 48" N. Longitude 33° 29' 32" E. Elevation 220 m. Near coast and south of Sevastopol. Flat, along road, disturbed, old orchard area.

PI 636639. Kengia serotina (L.) Packer
Wild. UKR-99-106; W6 21771. Collected 07/30/1999 in Krym, Ukraine. Latitude 44° 36' 34" N. Longitude 33° 29' 34" E. Elevation 20 m. Near Black Sea, Greek and Roman ruin a Sevastrol. Flat.

PI 636640. Elytrigia caespitosa (K. Koch) Nevski
Wild. UKR-99-108; W6 21773. Collected 07/31/1999 in Krym, Ukraine. Latitude 44° 23' 42" N. Longitude 33° 45' 12" E. Elevation 190 m. Along road A-294 near Foros. South slope, moderately steep,rocky.

PI 636641. Pseudoroegneria stipifolia (Czern. ex Nevski) A. Love
Wild. UKR-99-109; W6 21774. Collected 07/31/1999 in Krym, Ukraine. Latitude 44° 23' 42" N. Longitude 33° 45' 12" E. Elevation 190 m. Along road A-294 near Foros. South slope, moderately steep, rocky.

PI 636642. Lolium rigidum subsp. lepturoides (Boiss.) Sennen & Mauricio
Wild. UKR-99-242; W6 21873. Collected 08/03/1999 in Krym, Ukraine. Latitude 45° 25' 30" N. Longitude 36° 28' 19" E. Elevation 80 m. North of Kerch. Nearly flat to rolling hills, open, mud volcano area, salty with pH approximately 9.5, north of Kerch.

The following were donated by Khorshid Razmjoo, Taisei Biotechnology Research, 3-6 Akanehama, Narashino-shi, Chiba, Chiba 275, Japan. Received 08/28/1997.

PI 636643. Lolium perenne L.
Cultivated. PR3; W6 22037. Selected for flood tolerance. Flood tolerance method was: Potted plants grown under natural conditions and filled/flooded with water from winter until summer. Planted in field for two years and 4-8 clones were selected for disease resistance, color, leaf size and density under Japanese conditions.

PI 636644. Lolium perenne L.
Cultivated. PR4; W6 22038. Planted in field for two years and 4-8 clones were selected for disease resistance, color, leaf size and density under Japanese conditions.

PI 636645. Festuca arundinacea Schreb.
Cultivated. TF1; W6 22039. Selected for cold tolerance. Cold tolerance method was: Plants in pots were put in growth chamber. Temperature decrease 1 degree a day until -15C. Planted in field for two years and 4-8 clones were selected for disease resistance, color, leaf size and density under Japanese conditions.

PI 636646. Festuca arundinacea Schreb.
Cultivated. TF2; W6 22040. Selected for heat tolerance. Heat tolerance method was: Plants in pots were put in growth chamber. Temperature increase 1 degree a day until 50C. Planted in field for two years and 4-8 clones were selected for disease resistance, color, leaf size and density under Japanese conditions.

The following were collected by Bjoern Salomon, Swedish University od Agricultural Sciences, Department of Crop Science, P.O. Box 44, Alnarp, Malmohus S-23053, Sweden; C. Baden. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 636647. Leymus tianschanicus (Drobow) Tzvelev
Wild. H7722; W6 22074. Collected 08/28/1987 in Xinjiang, China. Elevation 1570 m. 38 km SW Urumqi stony desert slope. Ploidy: 10x.

The following were collected by Bo Lu, Shandong Provincial Department of Agriculture, Jinan, Shandong, China. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 636648. Elymus pseudonutans A. Love
Wild. H9043; W6 22127. Collected 1989 in Sichuan, China. Elevation 3800 m. Batang co., Yiduen, Haizishan Mount. 97 km from Batang to Litang.

The following were collected by N. Jacobsen. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 636649. Elymus pseudonutans A. Love
Wild. H9148; W6 22129. Collected 08/17/1990 in Gansu, China. Elevation 3000 m. ca 2 km W of tourist hotel, Xiahe.

The following were collected by Nikolai I. Dzyubenko, N.I. Vavilov All-Russian Scientific Research, Institute of Plant Genetic Resources, 44 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Blair Waldron, USDA, ARS, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States; R. Deane Harrison, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States; Auskhan Khusainov, Aral Sea Experimant Station for Plant Genetic Resources, 27 Biyekenov Street, Chelkar Town, Kazakhstan. Received 04/04/2000.

PI 636650. Leymus angustus (Trin.) Pilg.
Wild. Pkg# 40; W6 22390; PARL 39. Collected 10/1999 in Kazakhstan. Latitude 50° N. Longitude 60° 1' E. Elevation 229 m. Soil: salt loam and sand. Ppt = 250 mm.

PI 636651. Leymus karelinii (Turcz.) Tzvelev
Wild. Pkg# 54; W6 22403; PARL 52. Collected 10/1999 in Kazakhstan. Latitude 48° 38' N. Longitude 61° 22' E. Elevation 274 m. Soil: sand. Ppt = 250 mm.

The following were donated by Alan V. Stewart, Pyne Gould Guinness Ltd., P.O. Box 3100, 411 Blenheim Road, Christchurch, South Island 8015, New Zealand. Received 06/12/2000.

PI 636652. Agrostis lyallii Hook. f.
Wild. W6 22513. Collected 2000 in New Zealand. Collected near Lake Tekapo.

The following were collected by Art Gerrity, United States. Donated by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/09/2000.

PI 636653. Achnatherum hymenoides (Roem. & Schult.) Barkworth
Wild. Acc: 1098; W6 22882. Collected in Idaho, United States. Shoshone, ID.

The following were collected by Kay H. Asay, USDA, ARS, Forage & Range Research Unit, Utah State University, Logan, Utah 84322-6300, United States. Donated by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/09/2000.

PI 636654. Achnatherum hymenoides (Roem. & Schult.) Barkworth
Wild. Acc: 292; W6 22890. Collected in Wyoming, United States. 3 miles NW of Thermopolis, WY.

The following were collected by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Donated by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/09/2000.

PI 636655. Achnatherum hymenoides (Roem. & Schult.) Barkworth
Wild. Acc: 493; W6 22897.no passport data.

The following were collected by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/09/2000.

PI 636656. Achnatherum hymenoides (Roem. & Schult.) Barkworth
Wild. T-1184; W6 22908. Collected 2000 in Idaho, United States. Latitude 42° 57' 31" N. Longitude 115° 20' 41" W. I-84, mile marker 118.2, 2 miles W Glenn's Ferry, ID exit 120. associated plant spp. tall wheatgrass, cheatgrass, bitterbrush, big sagebrush, rabbitbrush.

PI 636657. Achnatherum hymenoides (Roem. & Schult.) Barkworth
Wild. T-483; W6 22922. Collected 2000 in Nevada, United States. Latitude 40° 58' N. Longitude 117° 47' W. Winnemucca, NV. associated plant spp. Kochia, Russian thistle.

PI 636658. Achnatherum hymenoides (Roem. & Schult.) Barkworth
Wild. T-547; W6 22926. Collected 2000 in Utah, United States. 1 mile SE Chimney Rock, Emery Co., UT. associated plant spp. snakeweed, Aristida, forbs.

PI 636659. Achnatherum hymenoides (Roem. & Schult.) Barkworth
Wild. T-558; W6 22931. Collected 2000 in Utah, United States. 1 mile S Bluff, UT on Hwy 193. associated plant spp. cheatgrass, Sphaeralcea.

PI 636660. Achnatherum hymenoides (Roem. & Schult.) Barkworth
Wild. T-561; W6 22933. Collected 2000 in Arizona, United States. 1 mile E of Kaibito turnoff on Hwy 98, mile marker 334, Kaibito, AZ. associated plant spp. Sphaeralcea.

PI 636661. Achnatherum hymenoides (Roem. & Schult.) Barkworth
Wild. T-582; W6 22937. Collected 2000 in Utah, United States. 4 miles SW turnoff to Little Sahara on Hwy 6, 11 miles N of Lynndyl, Juab Co., UT. associated plant spp. cheatgrass.

PI 636662. Leymus cinereus (Scribn. & Merr.) A. Love
Wild. T-1051; W6 23073. Collected 2000 in British Columbia, Canada. Latitude 50° 44' 32" N. Longitude 120° 4' 19" W. 2 m E Paul Lake, BC, campground Paul Lake Road. associated plant spp. quackgrass, Rosa, Douglas fir, ponderosa pine, black birch, sweet clover, snowberry, bearberry.

PI 636663. Leymus cinereus (Scribn. & Merr.) A. Love
Wild. T-1053; W6 23074. Collected 2000 in British Columbia, Canada. Latitude 50° 44' 35" N. Longitude 120° 24' 30" W. Batchelor Hill access, N Kamloops, BC, Batchelor Drive. associated plant spp. quackgrass, sandberg bluegrass, crested wheatgrass, Kochia, alfalfa, big sagebrush.

PI 636664. Leymus cinereus (Scribn. & Merr.) A. Love
Wild. T-1072; W6 23084. Collected 2000 in British Columbia, Canada. Latitude 49° 4' 10" N. Longitude 119° 0' 34" W. 1m W Rock Creek, BC, Hwy 3. associated plant spp. snowberry, knapweed, thistle, bluebunch wheatgrass, Idaho fescue.

PI 636665. Leymus cinereus (Scribn. & Merr.) A. Love
Wild. T-1073; W6 23085. Collected 2000 in Washington, United States. Latitude 48° 58' 2" N. Longitude 119° 29' 52" W. 3.6 miles W Oroville, WA (Central Ave.), 9 miles E Nighthawk, WA. associated plant spp. knapweed, crested wheatgrass, big sagebrush.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Stephanie Greene, USDA, ARS, National Temperate Forage Legume, Germplasm Resources Unit, Prosser, Washington 99350-9687, United States; Nikolai I. Dzyubenko, N.I. Vavilov All-Russian Scientific Research, Institute of Plant Genetic Resources, 44 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Auskhan Khusainov, Aral Sea Experimant Station for Plant Genetic Resources, 27 Biyekenov Street, Chelkar Town, Kazakhstan. Received 08/2000.

PI 636666. Stipa lessingiana Trin. & Rupr.
Wild. KAZ-010; W6 23296. Collected 08/2000 in Kazakhstan. Latitude 49° 24' 32" N. Longitude 57° 27' 6" E. Elevation 309 m.

PI 636667. Festuca pratensis Huds.
Wild. KAZ-229; W6 23322. Collected 08/2000 in Kazakhstan. Latitude 48° 43' 4" N. Longitude 58° 37' 13" E. Elevation 432 m.

The following were collected by Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Alicia Massa, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States; Raul Lira, INIA Kampenaike, Angamos 1056, Casilla 277, Punta Arenas, Magallanes, Chile; Mercedes Masco, INTA, E.E.A. Santa Cruz, CC 332, Rio Gallegos, Santa Cruz 9400, Argentina; Gabriel Oliva, INTA, E.E.A. Santa Cruz, CC 332, Rio Gallegos, Santa Cruz 9400, Argentina; Ivette Sequel, CRI Carillanca, General Lopez, IX Region, Temuco, La Araucania, Chile. Donated by Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 03/19/2001.

PI 636668. Bromus catharticus Vahl **var. catharticus**
Wild. PRO 96-2; W6 23387. Collected 02/16/1996 in Argentina. Latitude 50° 53' 6" S. Longitude 71° 34' 38" W. Elevation 420 m. Santa Cruz, Cruzada del Pelque, 26 km northeast from Tapi Aike toward El Cerrito. Slope:10-15 N. Collected at border of the road toward the plain. Site in good condition with 90-100% cover.

PI 636669. Bromus coloratus Steud.
Wild. PRO 96-4; W6 23389. Collected 02/17/1996 in Argentina. Latitude 50° 28' 22" S. Longitude 73° 1' 1" W. Elevation 240 m. Santa Cruz, Los Glaciares National Park, 3-4 km northeast from Ventisq.Perito Moreno. Slope:25-30% E. At the site much of the Bromus seed has shattered, the Trifolium repens is immature and Anemone multifida is being harv.

PI 636670. Elymus antarcticus Hook. f.
Wild. PRO 96-8; W6 23393. Collected 02/17/1996 in Argentina. Latitude

50° 29' 16" S. Longitude 72° 54' 53" W. Elevation 190 m. Santa Cruz, Los Glaciares National Park, 17 km northeast from Ventisq.Perito Moreno. Slope:30-35% E.

PI 636671. Elymus antarcticus Hook. f.
Wild. PRO 96-38; W6 23420. Collected 02/21/1996 in Chile. Latitude 51° 11' 3" S. Longitude 73° 1' 6" W. Elevation 20 m. Ultima Esperanza, Rio Grey, 4 km from Posada Rio Serrano, Torres del Paine National Park, 50. Slope:3%. Collected at edge of road.

PI 636672. Bromus coloratus Steud.
Wild. PRO 96-40; W6 23422. Collected 02/21/1996 in Chile. Latitude 51° 11' 3" S. Longitude 73° 1' 6" W. Elevation 20 m. Ultima Esperanza, Rio Grey, 4 km from Posada Rio Serrano, Torres del Paine National Park, 50. Slope:3%. Same population with two types morphology. Compact panicle, large seed.

PI 636673. Bromus coloratus Steud.
Wild. PRO 96-41; W6 23423. Collected 02/21/1996 in Chile. Latitude 51° 11' 3" S. Longitude 73° 1' 6" W. Elevation 20 m. Ultima Esperanza, Rio Grey, 4 km from Posada Rio Serrano, Torres del Paine National Park, 50. Slope:3%. Panicle lax. Over mature.

PI 636674. Bromus coloratus Steud.
Wild. PRO 96-85; W6 23458. Collected 02/28/1996 in Argentina. Latitude 54° 31' 11" S. Longitude 67° 13' 25" W. Tierra del Fuego, Lago Fagnano, 2 km west from Tolhuin, on shore of Lago Fagnano. Slope:10%. Spikes with deformities. Over mature.

PI 636675. Elymus gayanus E. Desv.
Wild. PRO 96-96; W6 23467. Collected 02/29/1996 in Argentina. Latitude 54° 53' 20" S. Longitude 67° 10' 52" W. Tierra del Fuego, Campground R. Cambaceres, 10 km southwest from Pto. Haberton. Slope:3% SE. With rhizomes. Harvested green seed.

The following were collected by Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Larry K. Holzworth, USDA-NRCS State Office, Federal Bldg., Room 443, 10 E. Babcock, Bozeman, Montana 59715-4704, United States; Gu Anlin, Chinese Academy of Agricultural Sciences, Grassland Research Institute, Range Ecology & Management, Huhhot, Nei Monggol 010010, China; Yi Jin, Inner Mongolia Agriculture University, Research Institute of Herbage physiology & Biology, Department of Agricultural Science Inner Mongolia, Huhhot, Nei Monggol 010018, China; Daniel J Miller, 5235 Western Avenue NW, Washington, District of Columbia 20015, United States. Received 06/18/2001.

PI 636676. Elymus sibiricus L.
Wild. TP00-02-007; W6 23483. Collected 08/20/2000 in Xizang, China. Latitude 35° 11' 40" N. Longitude 102° 39' 10" E. Elevation 2720 m. 10 km NE of Xiahe, Gansu Province. Road cut and fill SOIL:Silt SLOPE:0-80% ASPECT:S,SW.

PI 636677. Elymus pseudonutans A. Love
Wild. TP00-04-011; W6 23486. Collected 08/21/2000 in Xizang, China. Latitude 35° 6' 38" N. Longitude 102° 25' 53" E. Elevation 2960 m. 15 km SW of Xiahe, Gansu Province. Sangke Grassland, sub-alpine

meadow mainly used for winter grazing, some farmed 2000 years ago during Han Dynasty SOIL:Silt loam SLOPE:0-5% ASPECT:NE, SW.

PI 636678. Elymus dahuricus subsp. excelsus (Turcz. ex Griseb.) Tzvelev
Wild. TP00-09-035; W6 23507. Collected 08/23/2000 in Xizang, China. Latitude 34° 33' 49" N. Longitude 102° 33' 5" E. Elevation 2950 m. 5 km E of Luqu, Gansu Province. Sub-alpine meadow, fenced winter pasture SOIL:Loam SLOPE:0% ASPECT:Flat.

PI 636679. Kengyilia melanthera (Keng) J. L. Yang et al.
Wild. TP00-19-064; W6 23534. Collected 08/27/2000 in Xizang, China. Latitude 33° 19' 28" N. Longitude 102° 30' 15" E. Elevation 3310 m. 10 km S-SE of Tanggor, Sichuan Province. Stabilized sand dune, collected on lee side next to creek SOIL:Sandy SLOPE:0% ASPECT:Flat.

PI 636680. Elymus dahuricus Turcz. ex Griseb. **subsp. dahuricus**
Wild. TP00-35-119; W6 23581. Collected 09/02/2000 in Xizang, China. Latitude 31° 19' 30" N. Longitude 100° 44' 4" E. Elevation 3060 m. 12 km SE of Luhuo, Sichuan Province. Forage plant escapes, waste area along old farm access road SOIL:Gravelly sand SLOPE:3-5% ASPECT:S.

PI 636681. Elymus varius (Keng) Tzvelev
Wild. TP00-37-127; W6 23588. Collected 09/02/2000 in Xizang, China. Latitude 31° 32' 52" N. Longitude 100° 27' 56" E. Elevation 3210 m. 28 km NW of Luhuo, Sichuan Province. Sub-alpine meadow, Picea spp. planted SOIL:Gravelly clay loam SLOPE:3% ASPECT:NE.

PI 636682. Agrostis nervosa Nees ex Trin.
Wild. TP00-41-143; W6 23603. Collected 09/06/2000 in Xizang, China. Latitude 29° 53' 55" N. Longitude 100° 19' 6" E. Elevation 3780 m. 12 km S-SE of Litang, Banko Township, Sichuan Province. Marsh meadow, winter pasture SOIL:Clay loam SLOPE:0% ASPECT:Flat.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, U.S. Peace Corps, Cuerpo de Paz, Casilla #749, Sucre, Chuquisaca, Bolivia; Isabella Arevshatyan, Yerevan, Armenia; Eleonora Gabrielian, Department of Plant Systemics, Geography National Academie of Sciences, Institute of Botany, Yerevan, Armenia; Samvel M. Gasparian, Scientific Research Center of Viticulture, Fruit Growing and Wine Making, Merdzavan, Armenia; Vrez Manakyan, Armenia Academie of Science, Institute of Botany, Yerevan, Armenia; Ashot A. Charchoglian, National Academie of Sciences, Institute of Botany, Yerevan, Armenia. Received 06/24/2002.

PI 636683. Lens culinaris Medik. **subsp. culinaris**
Wild. ARM 170; W6 23901. Collected 08/12/2001 in Armenia. Latitude 40° 6' 27" N. Longitude 44° 28' 11" E. Elevation 897 m. Prosspekti Market, a large indoor market in Yerevan. Purchased seeds and garlic in this market. Where grown in on seed packets.

PI 636684. Lens culinaris Medik. **subsp. culinaris**
Wild. ARM 417; W6 24053. Collected 08/19/2001 in Armenia. Latitude 40° 6' 27" N. Longitude 44° 28' 11" E. Elevation 897 m. Prosspekti Market, a large indoor market in Yerevan. Purchased seeds and garlic in this market. Where grown in on seed packets.

The following were donated by Weidong Chen, USDA, ARS, Washington State University, 303 Johnson Hall, Pullman, Washington 99164, United States. Received 07/14/2003.

PI 636685. Lens culinaris Medik. **subsp. culinaris**
Cultivated. ILL 7502; W6 24349; W6 27768. Resistant to white mold.

PI 636686. Lens culinaris Medik. **subsp. culinaris**
Cultivated. ILL 9843; W6 24350. Resistant to white mold.

PI 636687. Lens culinaris Medik. **subsp. culinaris**
Cultivated. ILL 9938; W6 24352. Resistant to white mold.

The following were developed by Ronald D. Barnett, University of Florida, North Florida Res. & Ed. Center, 155 Research Road, Quincy, Florida 32351-5677, United States. Received 12/27/2004.

PI 636688. Avena sativa L.
Cultivar. Pureline. "HORIZON 321"; FL9708-P37. PVP 200500050. Pedigree - Coker 75-26/CI8341/4/Coker 76-19/Coker 75-27*2/3/Coker 75-26//Coker 76-23/CI8322/5/Horizon 314. A mid-season winter oat with excellent grain and forage production potential, good test weight and excellent disease resistance. It most closely resembles its Horizon 314 parent but is about 3 days earlier in heading and has better disease resistance, particularly to stem rust. It is between Horizon 314 and Horizon 474 in maturity. It also has a better yield record than Horizon 314 for both grain and forage production. It has dark colored upright leaves at booting similar to Horizon 314. It has white seed similar to Horizon 314. It is medium in height similar to Horizon 474 and about 6 inches shorter than Harrison. It has very good crown and stem rust resistance to the current races of these diseases.

The following were developed by Ronald D. Barnett, University of Florida, North Florida Res. & Ed. Center, 155 Research Road, Quincy, Florida 32351-5677, United States; University of Georgia Research Foundation, Inc., Athens, Georgia, United States. Received 12/27/2004.

PI 636689. Secale cereale L. **subsp. cereale**
Cultivar. Pureline. "AGS 104"; FLPL97P20. PVP 200500048. Pedigree - Originated from an equal mixture of 5 strain crosses: Strain 1 = Bates, WALC7, & Florida 401; Strain 2 = Maton, WALC7, & Florida 401; Strain 3 = Oklon, WALC7, & Florida 401; Strain 4 = NF 73, WALC7, & Florida 401; Strain 5 = BR1, WALC7, & Florida 401. These were grown in bulk, then put through 4 cycles of selection for high tillering, excellent forage production, disease resistance, proper maturity, and good seed production. This rye line has been entered into a number of forage trials and performs very well particularly for early season forage productions and it will work very well in blends with ryegrass for long season forage production. In appearance this line most closely resembles Wrens 96. It is slightly earler than Wrens 96 in maturity, shightly shorter in height. It has very good leaf rust resistance. AGS 104 has been released exclusively to AGSouth Genetics for marketing.

PI 636690. X Triticosecale sp.
Cultivar. Pureline. "MONARCH"; FL94128-Y1- A8. PVP 200500049. Pedigree - M93-188/FL87TH4004-3-N3-R1-S1-T1. After F6 selection, FL94128-Y1-A8 was entered in the Elite Triticale trial and a preliminary increase was grown. Across three locations Monarch averaged 4567 lbs of grain per acre compared to several checks in the trial: AGS 2000 wheat 4558 lbs/A, Florico 4263 lbs/A, Arcia 3393 lbs/A, and Sunland 3296 lbs/A. It was ranked 6th in yield among the 42 entries across locations. It was also included in the Official Georgia Variety Trials. It was ranked high for grain yield but was not in the top group for three location averages. It was included in a wildlife (mainly whitetail deer) preference trial in MS and was rated above all other small grains. Interest has been expressed for this line to use in wildlife food plots. This cultivar has been licensed exclusive to Southern Wildlife Seeds and Management, Senatobia, MS.

The following were developed by Joe W. Burton, USDA-ARS, Plant Science Research Building, 3127 Ligon Street, Raleigh, North Carolina 27607, United States; Greg Rebetzke, CSIRO Plant Industry, PO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Richard Wilson, USDA, ARS, George Washington Carver Center, 5601 Sunnyside Avenue, Beltsville, Maryland 20705-2212, United States; Vincent R. Pantalone, University of Tennessee, Department of Plant Sciences, 2431 Joe Johnson Drive, Knoxville, Tennessee 37996, United States. Received 01/13/2005.

PI 636691. Glycine max (L.) Merr.
Breeding. Pureline. N98-4445A. GP-313. Pedigree - N94-2473 X (N93-2007-4 X N92-3907). This line was developed by USDA-ARS, in cooperation with the North Carolina Agricultural Research Service. It has a concentration of oleic acid in the seed oil that is approximately 560 g/kg. This is between 340 and 380 g/kg greater than commercial soybean varieties, and 100 g/kg more than the highest oleic acid concentration available in the U.S. germplasm collection. The germplasm will be a useful genetic resource for breeding mid-oleic soybean varieties. Increased oleic acid in this line causes a correlated decrease in polyunsaturated fatty acids giving the added advantage of linolenic acid concentrations of less than 30 g/kg.

The following were collected by Nancy Bauman, Hoolehua Plant Materials Center, 4101 Maunaloa Highway, P. O. Box 236, Hoolehua, Hawaii 96729, United States. Donated by Shawn Belt, USDA, NRCS, National Plant Materials Center, Bldg. 509, BARC - East, Beltsville, Maryland 20705, United States. Received 12/09/2004.

PI 636692. Dodonaea viscosa Jacq.
Wild. 9079682; Florida Hopbush, Aalii in Hawaii; NSL 433487. Collected 07/07/2004 in Hawaii, United States. Latitude 21° 6' 5" N. Longitude 157° 57' 30" W. Elevation 122 m. Maui County, Molokai township. Very stony land, pH 6.1, 7-30% south-facing slope. Hot and dry with mean annual temperatur 73 F and precipitation of 24 inches. Seeds can be soaked in hot water 24 hours before planting to improve germination. Not considered to be invasive. Cross/Open pollinated. Release paper on file at NCGRP.

The following were developed by Juan Jose Salmeron-Zamora, INIFAP, Hidalgo No. 1213, Col. Centro Cd., Cuauhtemoc, Chihuahua C.P.31500, Mexico. Received 01/24/2005.

PI 636693. Avena sativa L.
Cultivar. Pureline. "Arareco". Pedigree - 79/Bordenave/Kenya SR/TAMO 386 (TX92M173). Flowers in 83 days, matures in 114 days, height is 98 cm. The culm internode is pubescent, panicle is equilateral and panicle branches are semi-erect. The dorsal surface of the lemma is glabrous, long, and white. Seed is awnless and the base is hairless. The rachilla is short.

The following were developed by Joe W. Burton, USDA-ARS, Plant Science Research Building, 3127 Ligon Street, Raleigh, North Carolina 27607, United States; Sam C. Anand, University of Missouri, Department of Agronomy, 210 Waters Hall, Columbia, Missouri 65211, United States; David A. Sleper, University of Missouri, Department of Agronomy, 271-F Life Sciences Center, Columbia, Missouri 65211, United States; J. Grover Shannon, University of Missouri-Columbia, Missouri Ag Experiment Station, Delta Research Center, Portageville, Missouri 63873, United States; Richard Wilson, USDA, ARS, George Washington Carver Center, 5601 Sunnyside Avenue, Beltsville, Maryland 20705-2212, United States; Prakash R. Arelli, USDA-ARS, 605 Airways Blvd., Jackson, Tennessee 38301, United States. Received 01/19/2005.

PI 636694. Glycine max (L.) Merr.
Breeding. Pureline. S01-9269. GP-309. Pedigree - S94-1867 x [S93-1475 x (`Holladay' x CX1538-70-5)]). Maturity group V, it has value as a parent in soybean improvement programs because of its broad resistance to soybean cyst nematode (SCN), and seed oil that averages half the saturated fatty acids as conventional soybeans. It is resistant to populations of SCN to races 1, 2, 3, 5, and 14 based on greenhouse screening, and is resistant to stem canker and bacterial pustule. Plants have a determinate growth habit with white flowers, tawny pubescence, tan pods and shiny yellow seed with brown hila. Seeds average 136 mg/seed in size, 438 g/kg protein and 177 g/kg oil. The fatty acid profile in percent averaged over nine locations for palmitate, stearate, oleate, linoleate, linolenate were 4.0, 2.8, 26.0, 57.8 and 9.4, respectively. Total saturates (palmitate + stearate) averaged 6.8% and ranged from 6.3 to 7.6% across environments.

The following were developed by J. Allen Wrather, University of Missouri, Agricultural Research and Extension, Delta Center, P.O. Box 160, Portageville, Missouri 63873, United States; Randall Nelson, USDA, ARS, National Soybean Research Center, University of Illinois, Urbana, Illinois 61801, United States; J. Grover Shannon, University of Missouri-Columbia, Missouri Ag Experiment Station, Delta Research Center, Portageville, Missouri 63873, United States. Received 01/19/2005.

PI 636695. Glycine max (L.) Merr.
Breeding. Pureline. S99-11509. GP-307. Pedigree - LG-71-7320 x Probst. A mid to late maturity group IV combining high yield on less productive soils of the southern US with unique diversity that is not known to be present in the current gene pool. Good performance on clay and sand show that this line has potential as parental material to breed for higher yielding lines on more stress prone soil types. It has purple

flowers, tawny pubescence, tan pods, shiny yellow seed coats and black hila, and is resistant to stem canker and bacterial pustule.

PI 636696. Glycine max (L.) Merr.
Breeding. Pureline. S99-11986. GP-308. Pedigree - LG87-1782 x LG88-3146. A late maturity group IV combining high yield on less productive soils of the southern US with unique diversity that is not known to be present in the current gene pool. Good performance on clay and sand show that this line has potential as parental material to breed for higher yielding lines on more stress prone soil types. It has white flowers, tawny pubescence, brown pods, shiny yellow seed coats and black hila, and is resistant to stem canker and bacterial pustule.

The following were developed by Johnnie Jenkins, USDA, ARS, Crop Sci. Res. Lab., P.O. Box 5367, Mississippi State, Mississippi 39760, United States; Jack McCarty, Mississippi State University, Dept. of Crop Science, P.O. Box 5367, Mississippi State, Mississippi 39762, United States. Received 01/19/2005.

PI 636697. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-41. GP-801. Pedigree - T-0041 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0041, it was evaluated for yield, yield components and fiber traits.

The following were developed by Jack McCarty, Mississippi State University, Dept. of Crop Science, P.O. Box 5367, Mississippi State, Mississippi 39762, United States. Received 01/19/2005.

PI 636698. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-50. GP-802. Pedigree - T-0050 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0050, it was evaluated for yield, yield components and fiber traits.

PI 636699. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-64. GP-803. Pedigree - T-0064 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0064, it was evaluated for yield, yield components and fiber traits.

PI 636700. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-81. GP-804. Pedigree - T-0081 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0081, it was evaluated for yield, yield components and fiber traits.

PI 636701. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-93. GP-805. Pedigree - T-0093 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0093, it was evaluated for yield, yield components and fiber traits.

PI 636702. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-149. GP-806. Pedigree - T-0149 was crossed

as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0149, it was evaluated for yield, yield components and fiber traits.

PI 636703. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-171. GP-807. Pedigree - T-0171 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0171, it was evaluated for yield, yield components and fiber traits.

PI 636704. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-173. GP-808. Pedigree - T-0173 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0173, it was evaluated for yield, yield components and fiber traits.

PI 636705. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-178. GP-809. Pedigree - T-0178 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0178, it was evaluated for yield, yield components and fiber traits.

PI 636706. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-209. GP-810. Pedigree - T-0209 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0209, it was evaluated for yield, yield components and fiber traits.

PI 636707. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-219. GP-811. Pedigree - T-0219 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0219, it was evaluated for yield, yield components and fiber traits.

PI 636708. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-221. GP-812. Pedigree - T-0221 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0221, it was evaluated for yield, yield components and fiber traits.

PI 636709. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-241. GP-813. Pedigree - T-0241 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0241, it was evaluated for yield, yield components and fiber traits.

PI 636710. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-338. GP-814. Pedigree - T-0338 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0338, it was evaluated for yield, yield components and fiber traits.

PI 636711. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-347. GP-815. Pedigree - T-0347 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0347, it was evaluated for yield, yield components and fiber traits.

PI 636712. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-620. GP-816. Pedigree - T-0620 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0620, it was evaluated for yield, yield components and fiber traits.

PI 636713. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-636. GP-817. Pedigree - T-0636 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0636, it was evaluated for yield, yield components and fiber traits.

PI 636714. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-725. GP-818. Pedigree - T-0725 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0725, it was evaluated for yield, yield components and fiber traits.

PI 636715. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-763. GP-819. Pedigree - T-0763 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0763, it was evaluated for yield, yield components and fiber traits.

PI 636716. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-764. GP-820. Pedigree - T-0764 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0764, it was evaluated for yield, yield components and fiber traits.

The following were developed by Johnnie Jenkins, USDA, ARS, Crop Sci. Res. Lab., P.O. Box 5367, Mississippi State, Mississippi 39760, United States; Jack McCarty, Mississippi State University, Dept. of Crop Science, P.O. Box 5367, Mississippi State, Mississippi 39762, United States. Received 01/19/2005.

PI 636717. Gossypium hirsutum L.
Breeding. Partinbred. M-0044-790. GP-821. Pedigree - T-0790 was crossed as male to Deltapine 16. A day-neutral germplasm line of cotton which was developed from the photoperiodic race stock T-0790, it was evaluated for yield, yield components and fiber traits.

The following were developed by Nunza B.V.. Received 01/31/2005.

PI 636718. Cynara cardunculus L.
Cultivar. "Concerto". PVP 200500044.

The following were developed by Seminis Vegetable Seeds, Inc., Woodland, California, United States. Received 01/31/2005.

PI 636719 PVPO. Coriandrum sativum L.
Cultivar. Pureline. "Talavera". PVP 200500045.

The following were developed by Progeny Advanced Genetics, Inc., Salinas, California, United States. Received 01/31/2005.

PI 636720 PVPO. Lactuca sativa L.
Cultivar. Pureline. "Avalanche". PVP 200500046.

The following were developed by W. Brotherton Seed Company, Inc., United States. Received 01/31/2005.

PI 636721 PVPO. Pisum sativum L.
Cultivar. Pureline. "Fiesty". PVP 200500047.

The following were developed by D&PL Technology Holding Company, LLC, Netherlands. Received 01/31/2005.

PI 636722 PVPO. Gossypium hirsutum L.
Cultivar. Pureline. "DP 455 BG/RR". PVP 200500052.

PI 636723 PVPO. Gossypium hirsutum L.
Cultivar. Pureline. "DP 543 BGII/RR". PVP 200500053.

The following were developed by W. Brotherton Seed Company, Inc., United States. Received 01/31/2005.

PI 636724 PVPO. Pisum sativum L.
Cultivar. Pureline. "Jumpstart". PVP 200500054.

The following were developed by Karen A. Moldenhauer, University of Arkansas, Rice Research & Extension Center, 2900 Hwy 130 E, Stuttgart, Arkansas 72160, United States; Fleet N. Lee, University of Arkansas, Rice Research & Extension Center, 2900 Hwy 130 E, Stuttgart, Arkansas 72160, United States; John Bernhardt, University of Arkansas, Rice Research & Extension Center, P.O. Box 351, Stuttgart, Arkansas 72160, United States; Arkansas Agricultural Experiment Station, University of Arkansas, Arkansas, United States; M.M. Blocker, University of Arkansas, Rice Research & Extension Center, P.O. Box 351, Stuttgart, Arkansas 72160, United States; Rick Cartwright, University of Arkansas, Cooperative Extension Service, P.O. Box 391, Little Rock, Arkansas 72203, United States; James W. Gibbons, University of Arkansas, Rice Research & Ext. Center, P.O. Box 351, Stuttgart, Arkansas 72160, United States; Kenneth Gravois, Louisiana State University, Sugar Research Station, 5755 LSU Ag. Road, St. Gabriel, Louisiana 70776, United States; Richard Norman, University of Arkansas, P.S. 115, Fayetteville, Arkansas 72701, United States; M.M. Anders, University of Arkansas, Rice Research and Extension Center, P.O. Box 351, Stuttgart, Arkansas 72160, United States; Jill Bulloch, University of Arkansas, Rice Research & Extension Center, 2900 Hwy 130 East, Stuttgart, Arkansas 72160, United States; Rolfe J. Bryant, USDA, ARS, Dale Bumpers National Rice Research Center, P.O. Box 1090, Stuttgart, Arkansas 72160, United States; J.-F. Meullenet, University of Arkansas, Dept. of Food Science, 2650 North Young Avenue, Fayetteville, Arkansas 72704, United States; K. Taylor, University of Arkansas, Rice Research and Extension Center, 2900 Hwy 130 E., Stuttgart, Arkansas 72160, United States. Received 01/31/2005.

PI 636725. Oryza sativa L.
Cultivar. Pureline. "MEDARK"; STG97F5-05-084. PVP 200500055; CV-123. Pedigree - Bengal/Short Rico. Released 2004. Medark is a semi-dwarf medium-grain rice cultivar adapted to the Southern U.S. It flowers in about 88 days in Arkansas. It has grain yield, height, grain quality, and lodging resistance similar to Bengal, but has improved tolerance to blast, brown spot, and straighthead diseases.

PI 636726. Oryza sativa L.
Cultivar. Pureline. "CYBONNET"; STG96F5-28-069. PVP 200500056; CV-122. Pedigree - Cypress//Newbonnet/Katy. Released 2004. Cybonnet is a semi-dwarf long-grain rice cultivar adapted to the Southern U.S. It flowers in about 88 days in Arkansas. It has milling quality similar to Cypress and blast resistance similar to Katy. Cybonnet is moderately susceptible to the straighthead disorder.

The following were developed by Crites-Moscow Growers, Inc., 212 8th, P.O. Box 8912, Moscow, Idaho 83843, United States. Received 01/31/2005.

PI 636727 PVPO. Pisum sativum L.
Cultivar. Pureline. "Kelly". PVP 200500057.

PI 636728 PVPO. Pisum sativum L.
Cultivar. Pureline. "Moose". PVP 200500058.

PI 636729 PVPO. Pisum sativum L.
Cultivar. Pureline. "Deschutes". PVP 200500059.

The following were developed by Pure Seed Testing, Inc., P.O. Box 449, Hubbard, Oregon 97032, United States. Received 01/31/2005.

PI 636730 PVPO. Agrostis stolonifera var. palustris (Huds.) Farw.
Cultivar. Pureline. "Penneagle II". PVP 200500060.

PI 636731. Agrostis stolonifera var. palustris (Huds.) Farw.
Cultivar. Pureline. "PennLinks II". PVP 200500061. Pedigree - Advanced generation synthetic selected from PennLinks creeping bentgrass. The plants used to begin the breeding project were selected because they were observed to have an endophtic fungus present in their leaf sheath tissue. Endophtic fungi has been demonstrated to convey beneficial characteristics, such as insect resistance to other turfgrass species. Mean mature plant height at least 4.9 cm shorter than PennLinks. Mean flag leaf length at least 1.0 cm shorter than PennLinks. Mean subtending leaf ligule length at least 0.5 mm shorter than PennLinks. Acceptable turf quality in turf trials throughout the USA. Moderate to good resistance to dollar spot an brown patch.

The following were developed by Pioneer Hi-Bred International, Inc., 6800 Pioneer Pkwy., P.O. Box 316, Johnston, Iowa 50131-0316, United States. Received 01/31/2005.

PI 636732 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "90M01". PVP 200500067.

The following were developed by Pioneer Hi-Bred International, Inc., Tipton, Indiana, United States. Received 01/31/2005.

PI 636733 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "90M40". PVP 200500068.

PI 636734 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "90M61". PVP 200500069.

PI 636735 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "90M91". PVP 200500070.

PI 636736 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "91M12". PVP 200500071.

PI 636737 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "91M13". PVP 200500072.

PI 636738 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "91M60". PVP 200500073.

PI 636739 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "91M70". PVP 200500074.

PI 636740 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "91M91". PVP 200500075.

The following were developed by Pioneer Hi-Bred International, Inc., 6800 Pioneer Pkwy., P.O. Box 316, Johnston, Iowa 50131-0316, United States. Received 01/31/2005.

PI 636741 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "92M01". PVP 200500076.

The following were developed by Pioneer Hi-Bred International, Inc., Tipton, Indiana, United States. Received 01/31/2005.

PI 636742 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "92M61". PVP 200500077.

PI 636743 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "93M01". PVP 200500078.

The following were developed by Pioneer Hi-Bred International, Inc., 6800 Pioneer Pkwy., P.O. Box 316, Johnston, Iowa 50131-0316, United States. Received 01/31/2005.

PI 636744 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "93M12". PVP 200500079.

PI 636745 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "93M42". PVP 200500080.

PI 636746 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "93M51". PVP 200500081.

PI 636747 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "93M94". PVP 200500082.

PI 636748 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "94M50". PVP 200500083.

PI 636749 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "94M80". PVP 200500084.

PI 636750 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "95M30". PVP 200500085.

PI 636751 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "95M50". PVP 200500086.

PI 636752 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "95M81". PVP 200500087.

PI 636753 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. "96M60". PVP 200500088.

The following were developed by University of Georgia Research Foundation, Inc., Athens, Georgia, United States. Received 01/31/2005.

PI 636754 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "McIntosh"; GA931233E17. PVP 200500089. Pedigree - Gore*2/T83267 = Gore*2//Coker916/FL302. Soft red winter wheat.

The following were developed by Paragon Seed, Inc., United States. Received 01/31/2005.

PI 636755 PVPO. Lactuca sativa L.
Cultivar. Pureline. "Flagstaff". PVP 200500090.

The following were developed by Debra Rush, Advanta Seeds Pacfic Inc., 33725 Columbus Street, P.O. Box 1496, Albany, Oregon 97321-0452, United States. Received 01/31/2005.

PI 636756 PVPO. Lolium perenne L.
Cultivar. Pureline. "". PVP 200500091.

The following were developed by Seed Research of Oregon, Inc., Corvallis, Oregon, United States. Received 01/31/2005.

PI 636757 PVPO. Poa pratensis L.
Cultivar. Pureline. "Kingfisher". PVP 200500092.

The following were developed by DLF International Seeds, Inc., United States. Received 01/31/2005.

PI 636758 PVPO. Poa trivialis L.
Cultivar. Pureline. "Sabre III". PVP 200500093.

The following were developed by Kenneth Hignight, Advanta Seeds West, Inc., 33725 Columbus Street S.E., P.O Box 1496, Albany, Oregon 97321-0452, United States. Received 01/31/2005.

PI 636759 PVPO. Festuca arundinacea Schreb.
Cultivar. Pureline. "Bonsai 3000". PVP 200500094.

PI 636760 PVPO. Festuca arundinacea Schreb.
Cultivar. Pureline. "Cortez II". PVP 200500095.

PI 636761 PVPO. Festuca trachyphylla (Hack.) Krajina
Cultivar. Pureline. PVP 200500096.

The following were developed by Cascade International Seed Co., Oregon, United States. Received 01/31/2005.

PI 636762 PVPO. Poa pratensis L.
Cultivar. Pureline. "Appalachian". PVP 200500097.

The following were developed by Jeff Pedersen, USDA, ARS, University of Nebraska, Department of Agronomy, Lincoln, Nebraska 68583-0937, United States; John J. Toy, USDA, ARS, University of Nebraska-Lincoln, Dept. of Agronomy, Lincoln, Nebraska 68583-0937, United States; Deanna Funnell, USDA-ARS, University of Nebraska, 314 BioChem - UNL, East Campus, Lincoln, Nebraska 68583-0737, United States; U.S. Government, as represented by the Secretary of Agric., Washington, District of Columbia, United States; A.L. Oliver, University of Nebraska-Lincoln, Dept. of Animal Science, Lincoln, Nebraska 68583-0908, United States; R.J. Grant, W.H. Miner Agric. Res. Institute, Chazy, New York 12921, United States. Received 01/31/2005.

PI 636763. Sorghum bicolor (L.) Moench **subsp. bicolor**
Cultivar. Pureline. "Atlas bmr-12". PVP 200500098; CV-136. Pedigree - Developed by crossing 'Atlas' to the brown midrib source F220 (bmr-12) followed by four cycles of selfing and backcrossing. Crossing was facilitated by the use of nuclear male-sterility gene ms3. Following the fourth backcross, the line was selfed and advanced head-to-row for 4 generations to fix the brown midrib gene in the homozygous recessive condition (bmr-12 bmr-12) and the male-sterility loci in the male-fertile condition (Ms3 Ms3). Exhibits the brown midrib phenotype, otherwise closely resembles Atlas. Like Atlas, it did not restore fertility in A1 cytoplasmic male-sterile lines under greenhouse conditions. Is 4 d earlier in maturity than Atlas and is 8 cm shorter in height than Atlas. Has white seed with no tannin-containing testa, normal white endosperm, is awnless, has purple necrotic wound response, and juicy culms. In yield trails conducted at Lincoln, NE and Ithaca, NE, average cell wall content was equivalent to Atlas. Lignin content was reduced (65 g kg-1 vs. 75 g kg-1) and fiber digestibility was increased (630 g kg-1 vs. 604 g kg-1). Average dry matter yield was reduced 14% when compared to Atlas (13.6 vs. 15.9 t/ha).

The following were developed by Syngenta Seeds, Inc., United States. Received 01/31/2005.

PI 636764 PVPO. Zea mays L.
Cultivar. Pureline. "NP2467". PVP 200500100.

The following were developed by University of Georgia Research Foundation, Inc., Athens, Georgia, United States. Received 01/31/2005.

PI 636765 PVPO. Trifolium repens L.
Cultivar. Pureline. "Resolute". PVP 200500101.

The following were donated by I. K. Simon, Research Institute for Irrigation, Szarvas, Bekes, Hungary. Received 08/07/1994.

PI 636766. Oryza sativa L.
Cultivar. Pureline. "TEKLA"; Q 36174. Developed in Hungary.

The following were donated by International Rice Research Institute, P.O. Box 3127, Makati Central Post Office, Makati City, Luzon 1271, Philippines. Received 05/14/1996.

PI 636767. Oryza sativa L.
Breeding. Pureline. IRTP 16584; BR2655-9-3-1; 920009; Q 36220. Developed in Bangladesh. Pedigree - BR10/BR4//BR7/IET2879. Site UA. Season DS. Nursery Remnant.

The following were donated by Robert H. Dilday, USDA-ARS, Dale Bumpers National Rice Res. Ctr., 2980 Hwy 130 East, Stuttgart, Arkansas 72160, United States. Received 05/15/1996.

PI 636768. Oryza sativa L.
Cultivar. Pureline. "HWAYOUNGBYEO"; Q 36281. Collected in Korea, South.

PI 636769. Oryza sativa L.
Cultivar. Pureline. "OBONGBYEO"; Q 36282. Developed in Korea, South. Pedigree - Daeseongbyeo/Fuji 269.

PI 636770. Oryza sativa L.
Cultivar. Pureline. "YOUNGSANBYEO"; Q 36283. Collected in Korea, South.

PI 636771. Oryza sativa L.
Cultivar. Pureline. "SOBACKBYEO"; Q 36284. Collected in Korea, South.

PI 636772. Oryza sativa L.
Cultivar. Pureline. "TAMJINBYEO"; Q 36285. Collected in Korea, South.

PI 636773. Oryza sativa L.
Cultivar. Pureline. "YOUNGNAMBYEO"; Q 36287. Collected in Korea, South.

PI 636774. Oryza sativa L.
Cultivar. Pureline. "JINMIBYEO"; Q 36288. Collected in Korea, South.

PI 636775. Oryza sativa L.
Cultivar. Pureline. "ODAEBYEO"; Q 36289. Developed in Korea, South.
Pedigree - Akitsuho/Fuji 269.

PI 636776. Oryza sativa L.
Cultivar. Pureline. "NAMWEONBYEO"; Q 36290. Developed in Korea, South.
Pedigree - Akiyudaka/Samnambyeo.

PI 636777. Oryza sativa L.
Cultivar. Pureline. "PALGONGBYEO"; Q 36291. Collected in Korea, South.

PI 636778. Oryza sativa L.
Cultivar. Pureline. "MAMKUMBYEO"; Q 36292. Collected in Korea, South.

PI 636779. Oryza sativa L.
Cultivar. Pureline. "SHINUNBONGBYEO"; Q 36293. Collected in Korea, South
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PI 636780. Oryza sativa L.
Cultivar. Pureline. "SANGJUBYEO"; Q 36294. Collected in Korea, South.

PI 636781. Oryza sativa L.
Cultivar. Pureline. "DAEYABYEO"; Q 36295. Developed in Korea, South.
Pedigree - Kanto PL5/Kanto PL3//HR4446.

PI 636782. Oryza sativa L.
Cultivar. Pureline. "CHUCHUNGBYEO"; Q 36296. Collected in Korea, South.

PI 636783. Oryza sativa L.
Cultivar. Pureline. "KUMOBYEO"; Q 36297. Collected in Korea, South.

PI 636784. Oryza sativa L.
Cultivar. Pureline. "KANCHUKBYEO"; Q 36298. Collected in Korea, South.

PI 636785. Oryza sativa L.
Cultivar. Pureline. "KYEHWABYEO"; Q 36300. Collected in Korea, South.

PI 636786. Oryza sativa L.
Cultivar. Pureline. "DAECHONGBYEO"; Q 36302. Developed in Korea, South.
Pedigree - Milyang 15/HR1590.

PI 636787. Oryza sativa L.
Cultivar. Pureline. "HWANAMBYEO"; Q 36304. Collected in Korea, South.

PI 636788. Oryza sativa L.
Cultivar. Pureline. "IRI 412"; Q 36305. Collected in Korea, South.

PI 636789. Oryza sativa L.
Cultivar. Pureline. "KAEHWA 13"; Q 36306. Collected in Korea, South.

PI 636790. Oryza sativa L.
Cultivar. Pureline. "IRI 418"; Q 36307. Collected in Korea, South.

PI 636791. Oryza sativa L.
Cultivar. Pureline. "MILYANG 144"; Q 36308. Developed in Korea, South.

PI 636792. Oryza sativa L.
Cultivar. Pureline. "SUWON 420"; Q 36309. Developed in Korea, South.

PI 636793. Oryza sativa L.
Cultivar. Pureline. "MILYANG 143"; Q 36310. Developed in Korea, South.

PI 636794. Oryza sativa L.
Cultivar. Pureline. "IRI 419"; Q 36311. Collected in Korea, South.

PI 636795. Oryza sativa L.
Cultivar. Pureline. "MILYANG 142"; Q 36312. Developed in Korea, South.

The following were donated by Fleet N. Lee, University of Arkansas, Rice Research & Extension Center, 2900 Hwy 130 E, Stuttgart, Arkansas 72160, United States. Received 09/10/1997.

PI 636796. Oryza hybrid
Breeding. Pureline. WAB450-I-B-P-105-HB; Q 37188. Developed in Cote D'Ivoire. Pedigree - WAB56-104/CG14.

The following were developed by Robert Guei, WARDA, 01 BP 2551, Bouake, Cote D'Ivoire. Donated by Fleet N. Lee, University of Arkansas, Rice Research & Extension Center, 2900 Hwy 130 E, Stuttgart, Arkansas 72160, United States. Received 09/10/1997.

PI 636797. Oryza glaberrima Steud.
Breeding. Pureline. CG 14; Q 37190.

PI 636798. Oryza sativa L.
Breeding. Pureline. WAB583-8-1; Q 37191.

The following were donated by Jefferson Luis da Silva Costa, EMBRAPA-CNPAF, CP 179, Goiania, Brazil. Received 03/13/1998.

PI 636799. Oryza sativa L.
Cultivar. Pureline. "CUIABANA"; Q 37523. Developed in Brazil. Pedigree - IAC47/SR2041-50-1.

PI 636800. Oryza sativa L.
Breeding. Pureline. "CAN 7460"; Q 37524.

PI 636801. Oryza sativa L.
Breeding. Pureline. "CAN 8154"; Q 37525.

PI 636802. Oryza sativa L.
Cultivar. Pureline. "DE ABRIL"; Q 37526. Collected in Brazil.

PI 636803. Oryza sativa L.
Cultivar. Pureline. "CATETO BICO PRETO"; Q 37528. Collected in Brazil.

PI 636804. Oryza sativa L.
Cultivar. Pureline. "CAMPINHO"; Q 37529. Collected in Brazil.

PI 636805. Oryza sativa L.
Cultivar. Pureline. "MIRANDEIRO"; Q 37530. Collected in Brazil.

PI 636806. Oryza sativa L.
Cultivar. Pureline. "IAC 1204"; Q 37533. Developed in Brazil.

PI 636807. Oryza sativa L.
Breeding. Pureline. "CAN 8061"; Q 37534.

PI 636808. Oryza sativa L.
Breeding. Pureline. "CAN 8070"; Q 37535.

PI 636809. Oryza sativa L.
Cultivar. Pureline. "URUCUI"; Q 37536. Developed in Brazil. Pedigree - IAC165//IAC165/PL9.

PI 636810. Oryza sativa L.
Cultivar. Pureline. "RIO PARANAIBA"; Q 37537. Developed in Brazil. Pedigree - IAC47/63-83.

PI 636811. Oryza sativa L.
Cultivar. Pureline. "GUARANI"; Q 37538. Developed in Brazil. Pedigree - IAC25/63-83.

PI 636812. Oryza sativa L.
Cultivar. Pureline. "CAIAPO"; Q 37539. Developed in Brazil. Pedigree - CNAX104/Perola.

PI 636813. Oryza sativa L.
Cultivar. Pureline. "CARAJAS"; Q 37540. Developed in Brazil. Pedigree - IREM293B/IAC81-176.

PI 636814. Oryza sativa L.
Breeding. Pureline. "CAN 8303"; Q 37541.

PI 636815. Oryza sativa L.
Cultivar. Pureline. "VERDADEIRO"; Q 37542. Developed in Brazil.

The following were donated by Robert H. Dilday, USDA-ARS, Dale Bumpers National Rice Res. Ctr., 2980 Hwy 130 East, Stuttgart, Arkansas 72160, United States. Received 03/31/1998.

PI 636816. Oryza sativa L.
Cultivated. Pureline. "SUWA"; 88-309; Q 37574. Collected in Japan. Collected in Nepal.

PI 636817. Oryza sativa L.
Cultivated. Pureline. 88-310; Marsi; Q 37575. Collected in Japan. Collected in Nepal.

PI 636818. Oryza sativa L.
Cultivated. Pureline. 88-311; Thankote; Q 37576. Collected in Japan. Collected in Nepal.

PI 636819. Oryza sativa L.
Cultivated. Pureline. 88-321; Bhuwa Dhan; Q 37577. Collected in Japan. Collected in Nepal.

PI 636820. Oryza sativa L.
Cultivated. Pureline. 88-322; Khetala Dhan; Q 37578. Collected in Japan. Collected in Nepal.

PI 636821. Oryza sativa L.
Cultivated. Pureline. 88-330; Bhua Dhan; Q 37579. Collected in Japan. Collected in Nepal.

PI 636822. Oryza sativa L.
Cultivated. Pureline. 89-200; Tangmaro Dhan; Q 37580. Collected in Japan. Collected in Nepal.

PI 636823. Oryza sativa L.
Cultivated. Pureline. 89-201; Kalo Marsi; Q 37581. Collected in Japan. Collected in Nepal.

PI 636824. Oryza sativa L.
Cultivated. Pureline. "KARI MARSI"; 89-292; Q 37582. Collected in Japan. Collected in Nepal.

PI 636825. Oryza sativa L.
Cultivated. 89-301; Lotan Serau; Q 37583. Collected in Japan. Collected in Nepal.

PI 636826. Oryza sativa L.
Cultivated. Pureline. 89-302; Bhuwa Dhan; Q 37584. Collected in Japan. Collected in Nepal.

PI 636827. Oryza sativa L.
Cultivated. Pureline. "IN SITT"; 7053; Q 37586. Collected in Japan. Collected in Nepal.

PI 636828. Oryza sativa L.
Cultivated. Pureline. "WZBEUSKIJ2"; 7083; Q 37589.

PI 636829. Oryza sativa L.
Cultivated. 7089; Li Zi Hong; Q 37590. Collected in China.

PI 636830. Oryza sativa L.
Cultivar. Pureline. "BANZAI"; 7103; Q 37591. Collected in Japan.

PI 636831. Oryza sativa L.
Breeding. Pureline. 92-1; Q 37594.

PI 636832. Oryza sativa L.
Breeding. Pureline. 92-2; Q 37595.

PI 636833. Oryza sativa L.
Breeding. Pureline. 92-32; Q 37596.

PI 636834. Oryza sativa L.
Breeding. Pureline. 92-33; Q 37597.

PI 636835. Oryza sativa L.
Breeding. Pureline. 92-34; Q 37598.

PI 636836. Oryza sativa L.
Breeding. Pureline. 92-35; Q 37599.

PI 636837. Oryza sativa L.
Breeding. Pureline. 92-36; Q 37600.

PI 636838. Oryza sativa L.
Breeding. Pureline. 92-37; Q 37601.

The following were donated by Robert Guei, WARDA, 01 BP 2551, Bouake, Cote D'Ivoire. Received 05/05/1998.

PI 636839. Oryza hybrid
Breeding. Pureline. WAB450-11-1-3-P40-HB; Q 37686. Developed in Cote D'Ivoire. Pedigree - WAB56-104 (O.sativa)/CG14 (O.glaberrima).

PI 636840. Oryza hybrid
Breeding. Pureline. WAB450-24-2-3-P33-HB; Q 37687. Developed in Cote D'Ivoire. Pedigree - WAB56-104 (O.sativa)/CG14 (O.glaberrima).

PI 636841. Oryza hybrid
Breeding. Pureline. WAB450-24-3-P38-1-HB; Q 37688. Developed in Cote D'Ivoire. Pedigree - WAB56-104 (O.sativa)/CG14 (O.glaberrima).

PI 636842. Oryza hybrid
Breeding. Pureline. WAB450-24-3-2-P18-HB; Q 37689. Developed in Cote D'Ivoire. Pedigree - WAB56-104 (O.sativa)/CG14 (O.glaberrima).

PI 636843. Oryza hybrid
Breeding. Pureline. WAB450-I-B-P-20-HB; Q 37690. Developed in Cote D'Ivoire. Pedigree - WAB56-104 (O.sativa)/CG14 (O.glaberrima).

PI 636844. Oryza hybrid
Breeding. Pureline. WAB450-I-B-P-23-HB; Q 37691. Developed in Cote D'Ivoire. Pedigree - WAB56-104 (O.sativa)/CG14 (O.glaberrima).

PI 636845. Oryza hybrid
Breeding. Pureline. WAB450-I-B-P-24-HB; Q 37692. Developed in Cote D'Ivoire. Pedigree - WAB56-104 (O.sativa)/CG14 (O.glaberrima).

PI 636846. Oryza hybrid
Breeding. Pureline. WAB450-I-B-P-38-HB; Q 37693. Developed in Cote D'Ivoire. Pedigree - WAB56-104 (O.sativa)/CG14 (O.glaberrima).

PI 636847. Oryza hybrid
Breeding. Pureline. WAB450-I-B-P-62-HB; Q 37694. Developed in Cote D'Ivoire. Pedigree - WAB56-104 (O.sativa)/CG14 (O.glaberrima).

PI 636848. Oryza hybrid
Breeding. Pureline. WAB450-I-B-P-160-HB; Q 37695. Developed in Cote D'Ivoire. Pedigree - WAB56-104 (O.sativa)/CG14 (O.glaberrima).

The following were donated by International Rice Research Institute, P.O. Box 3127, Makati Central Post Office, Makati City, Luzon 1271, Philippines. Received 05/19/1998.

PI 636849. Oryza sativa L.
Cultivar. Pureline. "AUS 363"; IRRI-IRGC-29150; Q 37698. Collected in Bangladesh.

PI 636850. Oryza sativa L.
Cultivar. Pureline. "BAZAIL 468"; IRRI-IRGC-32812; Q 37699. Collected in Bangladesh.

The following were donated by Taro Obata, National Inst. of Agro Resources, Dept. of Genetic Resources, Kannondai 2-1-2, Tsuaraki, Ibaraki 305, Japan. Received 06/24/1998.

PI 636851. Oryza sativa L.
Cultivar. Pureline. "KINUHIKARI"; 31139005; ACC 00059722; Q 37731. Developed in Japan. Pedigree - Shu 2800/Hokuriku 100//Nagoyutaka.

PI 636852. Oryza sativa L.
Cultivar. Pureline. "HINOHIKARI"; 31139005; ACC 00059905; Q 37732. Developed in Japan. Pedigree - Koganebare/Koshihikari.

PI 636853. Oryza sativa L.
Cultivar. Pureline. "SUITOU CHUUKANBOHON"; 31139005; ACC 00047892; Q 37733. Collected in Japan.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 07/31/1998.

PI 636854. Oryza sativa L.
Breeding. Pureline. WC 3; BW295-5; Q 37773. Developed in Sri Lanka. Pedigree - OB678/BW254-1.

PI 636855. Oryza sativa L.
Breeding. Pureline. WC 4; B 2850B SI-2-3; Q 37963. Developed in Indonesia. Pedigree - B541BKN91-3-1/IR2011-15-4-1-2.

The following were developed by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 636856. Oryza sativa L.
Breeding. Pureline. WC 6; CT5746-19-1-2X; Q 37964. Pedigree - P5269/Campeche A80.

PI 636857. Oryza sativa L.
Breeding. Pureline. WC 7; CT6188-1X; Q 37965. Pedigree - P5003/COL 1XM312A-74-2-8-8.

PI 636858. Oryza sativa L.
Breeding. Pureline. WC 8; CT6188-2X; Q 37966. Pedigree - P5003/COL 1XM312A-74-2-8-8.

PI 636859. Oryza sativa L.
Breeding. Pureline. WC 9; CT 6188-3X; Q 37967. Pedigree - P5003/COL 1XM312A-74-2-8-8.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 636860. Oryza sativa L.
Breeding. Pureline. WC 10; ECIA 24-107-1; Q 37968. Developed in Cuba. Pedigree - IR1529-430/VNI IR3223.

PI 636861. Oryza sativa L.
Breeding. Pureline. WC 11; ECIA 31-18-11; Q 37969. Developed in Cuba. Pedigree - IR1529-430/IR759-54-2-2-2.

PI 636862. Oryza sativa L.
Breeding. Pureline. WC 12; ECIA 31-21-1-1; Q 37970. Developed in Cuba. Pedigree - IR1529-430/IR759-54-2-2-2.

The following were developed by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 636863. Oryza sativa L.
Breeding. Pureline. WC 13; FLOTANTE 36 MUTANTE 3; Q 37971. Pedigree - mutant in Flotante 36.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 636864. Oryza sativa L.
Breeding. Pureline. WC 15; GZ864-2-3-1; Q 37972. Developed in Egypt. Pedigree - IR1561-228/IR1529-274-2-3.

PI 636865. Oryza sativa L.
Breeding. Pureline. WC 16; IG2018; Q 37973. Collected in Colombia.

PI 636866. Oryza sativa L.
Breeding. Pureline. WC 17; IG2035; Q 37974. Collected in Colombia.

PI 636867. Oryza sativa L.
Breeding. Pureline. WC 19; IRAT 128; Q 37975. Developed in Madagascar. Pedigree - DGWG/Makalioka.

The following were developed by International Rice Research Institute, P.O. Box 3127, Makati Central Post Office, Makati City, Luzon 1271, Philippines. Donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 636868. Oryza sativa L.
Breeding. Pureline. WC 22; IR10025-16-2; Q 37977. Pedigree - IR8513/IR9575.

PI 636869. Oryza sativa L.
Breeding. Pureline. WC 23; IR10029-26-2; Q 37978. Pedigree - IR8514/IR9575.

PI 636870. Oryza sativa L.
Breeding. Pureline. WC 24; IR10781-75-3-2-2; Q 37979. Pedigree - BG90-2/IR2863-38-1.

PI 636871. Oryza sativa L.
Breeding. Pureline. WC 25; IR10791-75-3-2-2; Q 37980. Pedigree - Cadung Gocong 1601/IR34.

PI 636872. Oryza sativa L.
Breeding. Pureline. WC 27; IR11418-19-2-3; Q 37982. Pedigree - IR2863-38-1/IR46.

PI 636873. Oryza sativa L.
Breeding. Pureline. WC 28; IR13240-82-2-3-2-3-1; Q 37983. Pedigree - IR30 (BPH S)/Babawee//IR36.

PI 636874. Oryza sativa L.
Breeding. Pureline. WC 29; IR13257-46-1E-P1; Q 37984. Pedigree - IR10980/IR2797-84-1-5.

PI 636875. Oryza sativa L.
Breeding. Pureline. WC 30; IR14753-120-3; Q 37985. Pedigree - IR4683-54-2/IR46.

PI 636876. Oryza sativa L.
Breeding. Pureline. WC 31; IR18189-42-2-3; Q 37986. Pedigree - IR4219-35-3-3-/IR46.

PI 636877. Oryza sativa L.
Breeding. Pureline. WC 33; IR2055-466-6-6; Q 37988. Pedigree - BPI121-407/IR1833.

PI 636878. Oryza sativa L.
Breeding. Pureline. WC 34; IR2055-473-1-5-1-CU; Q 37989. Pedigree - BPI121-407/IR1833.

PI 636879. Oryza sativa L.
Breeding. Pureline. WC 36; IR21015-72-3-3-3-1; Q 37990. Pedigree - IR17584/IR52.

PI 636880. Oryza sativa L.
Breeding. Pureline. WC 37; IR24760-69-2; Q 37991. Pedigree - IR20312/IR54.

PI 636881. Oryza sativa L.
Breeding. Pureline. WC 38; IR24761-57-2; Q 37992. Pedigree - IR20313/IR5853-198-1-2.

PI 636882. Oryza sativa L.
Breeding. Pureline. WC 39; IR25560-109-3-1-3-2; Q 37993. Pedigree - IR54/IR48.

PI 636883. Oryza sativa L.
Breeding. Pureline. WC 40; IR25586-45-1-2; Q 37994. Pedigree - IR19657-37-3/IR4570-124-3-2-2-2.

PI 636884. Oryza sativa L.
Breeding. Pureline. WC 43; IR31916-9-2-2-2; Q 37996. Pedigree - IR27193/IR9129-209-2-2-2-1.

PI 636885. Oryza sativa L.
Breeding. Pureline. WC 44; IR31917-45-3-2-2; Q 37997. Pedigree - IR27193/IR17494-32-3-1-1-3.

PI 636886. Oryza sativa L.
Breeding. Pureline. WC 45; IR4422-480-2-2-3; Q 37998. Pedigree - IR2049-134-2/IR2061-125-37.

PI 636887. Oryza sativa L.
Breeding. Pureline. WC 47; IR4427-274-4-3-2; Q 38000. Pedigree - IR2055-451-2/IR2061-464-4.

PI 636888. Oryza sativa L.
Breeding. Pureline. WC 50; IR5533-PP-850-1; Q 38002. Pedigree - IR8/3/IR8/Carreon//IR8/Tetep.

PI 636889. Oryza sativa L.
Breeding. Pureline. WC 51; IR8098-41-3; Q 38003. Pedigree - IR6583/IR2061-213-2-16.

PI 636890. Oryza sativa L.
Breeding. Pureline. WC 52; IR9217-58-2-2; Q 38004. Pedigree - IR7512/IR2058-78-1-3-3-3.

PI 636891. Oryza sativa L.
Breeding. Pureline. WC 53; IR9575; Q 38005. Pedigree - BPI76//BPI76*8/Dawn.

PI 636892. Oryza sativa L.
Breeding. Pureline. WC 54; IR9852-18-1; Q 38006. Pedigree - IR8805/IR36.

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PI 636893. Oryza sativa L.
Cultivar. Pureline. WC 55; ISA 6; Q 38007. Developed in Cote D'Ivoire.

PI 636894. Oryza sativa L.
Breeding. Pureline. WC 56; MRC 5720-3427; Q 38008. Developed in Philippines.

PI 636895. Oryza sativa L.
Breeding. Pureline. WC 57; NGOVIE-A; Q 38009. Collected in Colombia.

PI 636896. Oryza sativa L.
Breeding. Pureline. WC 58; PDR 34-2-1-2; Q 38010. Developed in Pakistan. Pedigree - IR6/IR828.

PI 636897. Oryza sativa L.
Breeding. Pureline. WC 59; PDR 76-D10-D8-D1; Q 38011. Developed in Pakistan. Pedigree - IR2061/IR1561.

PI 636898. Oryza sativa L.
Breeding. Pureline. WC 60; PNA 343-F4-232-1-1X; Q 38012. Developed in Peru. Pedigree - IR1721-14-6-4-2/INTI.

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PI 636899. Oryza sativa L.
Breeding. Pureline. WC 62; P 1377-1-15M-1-2M-3; Q 38013. Pedigree - P1221/P1224.

PI 636900. Oryza sativa L.
Breeding. Pureline. WC 63; P 1441-2-2M-3-1M-1B; Q 38014. Pedigree - P1223/P1237.

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PI 636901. Oryza sativa L.
Cultivar. Pureline. WC 71; P2030F4-88-1-2; PA 2; Q 38018. Developed in Peru. Pedigree - CICA4/P1889.

PI 636902. Oryza sativa L.
Breeding. Pureline. WC 72; P 2030-F4-235-1B-1B-COL; Q 38019. Developed in Peru. Pedigree - CICA4/P1889.

The following were developed by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 636903. Oryza sativa L.
Breeding. Pureline. WC 73; P 2053-F4-81-6-4; Q 38020. Pedigree - CICA7/P1908.

PI 636904. Oryza sativa L.
Breeding. Pureline. WC 74; P 2053-F4-99-4-4; Q 38021. Pedigree - CICA7/P1908.

PI 636905. Oryza sativa L.
Breeding. Pureline. WC 75; P 2053-F4-169-8-1; Q 38022. Pedigree - CICA7/P1908.

PI 636906. Oryza sativa L.
Breeding. Pureline. WC 76; P 2060-F4-29-6-2; Q 38023. Pedigree - CICA7/P1916.

PI 636907. Oryza sativa L.
Breeding. Pureline. WC 77; P 2062-F4-17-33-1; Q 38024. Pedigree - CICA7/P1919.

PI 636908. Oryza sativa L.
Breeding. Pureline. WC 78; P 2186-F4-2-2; Q 38025. Pedigree - CICA8/P1946.

PI 636909. Oryza sativa L.
Breeding. Pureline. WC 79; P 2189-F4-64-5; Q 38026. Pedigree - CICA8/P1985.

PI 636910. Oryza sativa L.
Breeding. Pureline. WC 80; P 2191-F4-39-5-1B-3-1B; Q 38027. Pedigree - CICA9/P1985.

PI 636911. Oryza sativa L.
Breeding. Pureline. WC 81; P 2192-F4-30-1B-1B-5; Q 38028. Pedigree - CICA7/P1986.

PI 636912. Oryza sativa L.
Breeding. Pureline. WC 82; P 2192-F4-39-5-1B-2; Q 38029. Pedigree - CICA7/P1986.

PI 636913. Oryza sativa L.
Breeding. Pureline. WC 86; P 2217-F4-2-1; Q 38030. Pedigree - CICA7/P1969.

PI 636914. Oryza sativa L.
Breeding. Pureline. WC 87; P 2217-F4-30-4; Q 38031. Pedigree - CICA7/P1969.

PI 636915. Oryza sativa L.
Breeding. Pureline. WC 88; P 2217-F4-67-1B; Q 38032. Pedigree - CICA7/P1969.

PI 636916. Oryza sativa L.
Breeding. Pureline. WC 89; P 2231-F4-13-2-1B; Q 38033. Pedigree - CICA7/P1970.

PI 636917. Oryza sativa L.
Breeding. Pureline. WC 90; P 2231-F4-138-2; Q 38034. Pedigree - CICA7/P1970.

PI 636918. Oryza sativa L.
Breeding. Pureline. WC 91; P 2231-F4-138-2-1-1; Q 38035. Pedigree - CICA7/P1970.

PI 636919. Oryza sativa L.
Breeding. Pureline. WC 92; P 2231-F4-138-6; Q 38036. Pedigree - CICA7/P1970.

PI 636920. Oryza sativa L.
Breeding. Pureline. WC 93; P 2231-F4-138-6-2-1; Q 38037. Pedigree - CICA7/P1970.

PI 636921. Oryza sativa L.
Breeding. Pureline. WC 94; P 2359-F4-9; Q 38038. Pedigree - Tapuripa/CICA4.

PI 636922. *Oryza sativa* L.
Breeding. Pureline. WC 95; P 2737-F4-20-1B; Q 38039. Pedigree - BG90-2/P2736.

PI 636923. *Oryza sativa* L.
Breeding. Pureline. WC 96; P 2786-F4-19-7-4; Q 38040. Pedigree - IR532-1-33/P2610.

PI 636924. *Oryza sativa* L.
Breeding. Pureline. WC 97; P 2851-F4-145-9-5P-1B-10; Q 38041. Pedigree - S7-6/P2618.

PI 636925. *Oryza sativa* L.
Breeding. Pureline. WC 98; P 2859-F4-99-1; Q 38042. Pedigree - CICA4/P2618.

PI 636926. *Oryza sativa* L.
Breeding. Pureline. WC 100; P 2867-F4-52-2; Q 38043. Pedigree - BG94-1/P2618.

PI 636927. *Oryza sativa* L.
Breeding. Pureline. WC 101; P 2887-F4-9-4; Q 38044. Pedigree - S13-2/P2620.

PI 636928. *Oryza sativa* L.
Breeding. Pureline. WC 102; P 2887-F4-12M-6P-2M-1B; Q 38045. Pedigree - S13-2/P2620.

PI 636929. *Oryza sativa* L.
Breeding. Pureline. WC 103; P 2945-F4-41-1; Q 38046. Pedigree - S7-6/P2625.

PI 636930. *Oryza sativa* L.
Breeding. Pureline. WC 104; P 3050-F4-52; Q 38047. Pedigree - BG90-2/P2672.

PI 636931. *Oryza sativa* L.
Breeding. Pureline. WC 105; P 3055-F4-3-3P-2P-1B; Q 38048. Pedigree - S5-11/P2672.

PI 636932. *Oryza sativa* L.
Breeding. Pureline. WC 106; P 3055-F4-3-4P-1P-1B; Q 38049. Pedigree - S5-11/P2672.

PI 636933. *Oryza sativa* L.
Breeding. Pureline. WC 107; P 3059-F4-11M-2P-2P-1B; Q 38050. Pedigree - P1447-3-1M-5-1M-1B/P2672.

PI 636934. *Oryza sativa* L.
Breeding. Pureline. WC 108; P 3059-F4-25-3-1B-1X; Q 38051. Pedigree - P1447-3-1M-5-1M-1B/P2672.

PI 636935. *Oryza sativa* L.
Breeding. Pureline. WC 109; P 3059-F4-79-1-1B; Q 38052. Pedigree - P1447-3-1M-5-1M-1B/P2672.

PI 636936. Oryza sativa L.
Breeding. Pureline. WC 111; P 3059-F4-136-4-10M-1B-1X; Q 38053. Pedigree - P1447-3-1M-5-1M-1B/P2672.

PI 636937. Oryza sativa L.
Breeding. Pureline. WC 113; P 3081-F4-34; Q 38055. Pedigree - CICA4/P2624.

PI 636938. Oryza sativa L.
Breeding. Pureline. WC 114; P 3081-F4-76; Q 38056. Pedigree - CICA4/P2624.

PI 636939. Oryza sativa L.
Breeding. Pureline. WC 115; P 3082-F4-18; Q 38057. Pedigree - P1397-4-9M-3-3M-3/P2624.

PI 636940. Oryza sativa L.
Breeding. Pureline. WC 116; P 3082-F4-73; Q 38058. Pedigree - P1397-4-9M-3-3M-3/P2624.

PI 636941. Oryza sativa L.
Breeding. Pureline. WC 119; P 3085-F4-14-2P-1M-1B; Q 38060. Pedigree - P1496-7-7M-5-3M-1B/P2624.

PI 636942. Oryza sativa L.
Breeding. Pureline. WC 120; P 3284-F4-5-7; Q 38061. Pedigree - Oryzica 1/P3110.

PI 636943. Oryza sativa L.
Breeding. Pureline. WC 121; P 3293-F4-27-1P-1B; Q 38062. Pedigree - Oryzica 1/P3117.

PI 636944. Oryza sativa L.
Breeding. Pureline. WC 123; P 3293-F4-48; Q 38064. Pedigree - Oryzica 1/P3117.

PI 636945. Oryza sativa L.
Breeding. Pureline. WC 124; P 3299-F4-1B-1X; Q 38065. Pedigree - P1274-6-8M-1-3M-1/P3119.

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PI 636946. Oryza sativa L.
Cultivar. Pureline. "ICTA MOTAGUA"; WC 125; Q 38066. Developed in Guatemala. Pedigree - Oryzica 1/P3129.

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PI 636947. Oryza sativa L.
Breeding. Pureline. WC 126; P 3304-F4-12-1; Q 38067. Pedigree - Oryzica 1/P3129.

PI 636948. *Oryza sativa* L.
Breeding. Pureline. WC 129; P 3621-F2-1-4-1-1B-1X; Q 38068. Pedigree - Metica 1/P2606.

PI 636949. *Oryza sativa* L.
Breeding. Pureline. WC 130; P 3790-F4-6-1-1X; Q 38069. Pedigree - Metica 1/P3557.

PI 636950. *Oryza sativa* L.
Breeding. Pureline. WC 131; P 3796-F4-13-2; Q 38070. Pedigree - Metica 1/P3558.

PI 636951. *Oryza sativa* L.
Breeding. Pureline. WC 132; P 3805-F4-9-2; Q 38071. Pedigree - Taichung Sen Yu 195/P3561.

PI 636952. *Oryza sativa* L.
Breeding. Pureline. WC 133; P 3817-F4-6-1; Q 38072. Pedigree - Oryzica 1/P3143.

PI 636953. *Oryza sativa* L.
Breeding. Pureline. WC 134; P 3843-F4-10; Q 38073. Pedigree - P1897-15-1-4-1-1B/P3568.

PI 636954. *Oryza sativa* L.
Breeding. Pureline. WC 135; P 3843-F4-13; Q 38074. Pedigree - P1897-15-1-4-1-1B/P3568.

PI 636955. *Oryza sativa* L.
Breeding. Pureline. WC 136; P 3844-F3-18-5-1B-1X; Q 38075. Pedigree - Oryzica 1/P3568.

PI 636956. *Oryza sativa* L.
Breeding. Pureline. WC 137; P 3844-F3-19-1-1B-1X; Q 38076. Pedigree - Oryzica 1/P3568.

PI 636957. *Oryza sativa* L.
Breeding. Pureline. WC 138; P 3844-F3-22-1-1X; Q 38077. Pedigree - Oryzica 1/P3568.

PI 636958. *Oryza sativa* L.
Breeding. Pureline. WC 139; P 3902-F3-15-2-1B-1X; Q 38078. Pedigree - P1897-15-1-4-1-1B/P3586.

PI 636959. *Oryza sativa* L.
Breeding. Pureline. WC 140; P 4127-F3-33-3-1B-1X; Q 38079. Pedigree - metica 1/P2299.

PI 636960. *Oryza sativa* L.
Breeding. Pureline. WC 141; P 4140-F3-2; Q 38080. Pedigree - P1274-6-8M-1-3M-1/P3762.

PI 636961. *Oryza sativa* L.
Breeding. Pureline. WC 142; P 4277-F2-2-9-1X; Q 38081. Pedigree - P2622/IR2153-276-1-10-PR509.

PI 636962. *Oryza sativa* L.
Breeding. Pureline. WC 144; P 4278-F2-80-4-1X; Q 38083. Pedigree - P2622/IR8073-65-6-1.

PI 636963. *Oryza sativa* L.
Breeding. Pureline. WC 145; P 4278-F2-84-1-1X; Q 38084. Pedigree - P2622/IR8073-65-6-1.

PI 636964. *Oryza sativa* L.
Breeding. Pureline. WC 146; P 4278-F2-84-1-3X; Q 38085. Pedigree - P2622/IR8073-65-6-1.

PI 636965. *Oryza sativa* L.
Breeding. Pureline. WC 147; P 4278-F2-84-1-5X; Q 38086. Pedigree - P2622/IR8073-65-6-1.

PI 636966. *Oryza sativa* L.
Breeding. Pureline. WC 148; P 4711-F2-6-5-1X; Q 38087. Pedigree - P2016-F4-87-5/P3958.

PI 636967. *Oryza sativa* L.
Breeding. Pureline. WC 149; P 4711-F2-51-5-1X; Q 38088. Pedigree - P2016-F4-87-5/P3958.

PI 636968. *Oryza sativa* L.
Breeding. Pureline. WC 150; P 4711-F2-78-4-1X; Q 38089. Pedigree - P2016-F4-87-5/P3958.

PI 636969. *Oryza sativa* L.
Breeding. Pureline. WC 152; P 4718-F2-43-6-1X; Q 38091. Pedigree - P2026-F4-49-5-5/P4054.

PI 636970. *Oryza sativa* L.
Breeding. Pureline. WC 153; P 4725-F2-9-6-1X; Q 38092. Pedigree - P2026-F4-49-5-5/P3985.

PI 636971. *Oryza sativa* L.
Breeding. Pureline. WC 154; P 4725-F2-16-7-1x; Q 38093. Pedigree - P2026-F4-49-5-5/P3985.

PI 636972. *Oryza sativa* L.
Breeding. Pureline. WC 155; P 4725-F2-43-1B-1X; Q 38094. Pedigree - P2026-F4-49-5-5/P3985.

PI 636973. *Oryza sativa* L.
Breeding. Pureline. WC 156; P 4725-F2-59-1-1X; Q 38095. Pedigree - P2026-F4-49-5-5/P3985.

PI 636974. *Oryza sativa* L.
Breeding. Pureline. WC 157; P 4743-F2-80-2-1X; Q 38096. Pedigree - P1274-6-8M-1-3M-1/P4205.

PI 636975. *Oryza sativa* L.
Breeding. Pureline. WC 158; P 4743-F2-85-6-1X; Q 38097. Pedigree - P1274-6-8M-1-3M-1/P4205.

PI 636976. *Oryza sativa* L.
Breeding. Pureline. WC 159; P 5166-F2-12-12-1X; Q 38098. Pedigree - P1482-8-9M-1-2M-1B/P4567.

PI 636977. *Oryza sativa* L.
Breeding. Pureline. WC 161; P 5406-7-1-1X; Q 38100. Pedigree - P4607/P5004.

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PI 636978. *Oryza sativa* L.
Breeding. Pureline. WC 164; TOX 1012-12-3-1; Q 38101. Developed in Nigeria. Pedigree - IRAT13/Dourado 689//Tox 490-6-8-1.

PI 636979. *Oryza sativa* L.
Breeding. Pureline. WC 165; TOX 1177-17-16-8-1CH-2P; Q 38102. Developed in Nigeria. Pedigree - P36/Tox 494.

PI 636980. *Oryza sativa* L.
Breeding. Pureline. WC 166; TOX 1766-9-4-1B; Q 38103. Developed in Nigeria. Pedigree - TOX1525-F2-DW/TOX1337-F2.

PI 636981. *Oryza sativa* L.
Breeding. Pureline. WC 167; TOX 1768-1-2-1; Q 38104. Developed in Nigeria. Pedigree - TOX1525-F2-DW/Ngovie 20 SLR.

PI 636982. *Oryza sativa* L.
Breeding. Pureline. WC 168; TOX 1779-3-3-201-1b; Q 38105. Developed in Nigeria. Pedigree - TOX1525-F2-DW/OS6.

PI 636983. *Oryza sativa* L.
Breeding. Pureline. WC 170; TOX 1780-2-3-5; Q 38107. Developed in Nigeria. Pedigree - TOX1525-F2-DW//Norin 6/TOX340-F2.

PI 636984. *Oryza sativa* L.
Breeding. Pureline. WC 171; TOX 1816-102-3; Q 38108. Developed in Nigeria. Pedigree - BG6852/LAC23.

PI 636985. *Oryza sativa* L.
Breeding. Pureline. WC 172; TOX 1840-3-2-3X; Q 38109. Developed in Nigeria.

PI 636986. *Oryza sativa* L.
Breeding. Pureline. WC 173; TOX 1840-3-2-4X; Q 38110. Developed in Nigeria.

PI 636987. *Oryza sativa* L.
Breeding. Pureline. WC 174; TOX 1857-3-2-201-1; Q 38111. Developed in Nigeria. Pedigree - IURON122/RP1017-76-1-4-3.

PI 636988. *Oryza sativa* L.
Breeding. Pureline. WC 175; TOX 1871-15-1; Q 38112. Developed in Nigeria. Pedigree - COLL6850/TOX1192-16.

PI 636989. *Oryza sativa* L.
Breeding. Pureline. WC 176; TOX 1871-38-1; Q 38113. Developed in Nigeria. Pedigree - COLL6850/TOX1192-16.

PI 636990. *Oryza sativa* L.
Breeding. Pureline. WC 178; TOX 1871-38-5; Q 38114. Developed in Nigeria. Pedigree - COLL6850/TOX1192-16.

PI 636991. *Oryza sativa* L.
Breeding. Pureline. WC 179; TOX 711-F3-13; Q 38115. Developed in Nigeria. Pedigree - IR5/Suakoko 8.

PI 636992. *Oryza sativa* L.
Breeding. Pureline. WC 180; TOX 711-F3-18; Q 38116. Developed in Nigeria. Pedigree - IR5/Suakoko 8.

PI 636993. *Oryza sativa* L.
Breeding. Pureline. WC 181; TOX 718-AL-11-1CM-1JU; Q 38117. Developed in Nigeria. Pedigree - OS6/IRAT13.

PI 636994. *Oryza sativa* L.
Breeding. Pureline. WC 182; TOX 718-AL-20-1CM-1JN; Q 38118. Developed in Nigeria. Pedigree - OS6/IRAT13.

PI 636995. *Oryza sativa* L.
Breeding. Pureline. WC 183; TOX 718-AL-27-1CM-1JN; Q 38119. Developed in Nigeria. Pedigree - OS6/IRAT13.

PI 636996. *Oryza sativa* L.
Breeding. Pureline. WC 184; TOX 891-212-2-102-2-101-1-1B-3; Q 38120. Developed in Nigeria. Pedigree - IR8230-12-1/LAC23 white.

PI 636997. *Oryza sativa* L.
Breeding. Pureline. WC 185; TOX 909-11-201-3-1-3; Q 38121. Developed in Nigeria. Pedigree - 4445/Suakoko 8.

PI 636998. *Oryza sativa* L.
Breeding. Pureline. WC 186; TOX 936-81-3-5-201-1B-1CM; Q 38122. Developed in Nigeria. Pedigree - IR43/Iguape Cateto.

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PI 636999. *Oryza sativa* L.
Breeding. Pureline. WC 188; 1170; Q 38123. Pedigree - BG90-2//IR1541/OB678.

PI 637000. *Oryza sativa* L.
Breeding. Pureline. WC 190; 1845; Q 38124. Pedigree - IR580//BG66-1/IR22.

PI 637001. *Oryza sativa* L.
Breeding. Pureline. WC 191; 1853; Q 38125. Pedigree - IR580//BG66-1/IR22.

PI 637002. Oryza sativa L.
Breeding. Pureline. WC 192; 1854; Q 38126. Pedigree - IR580//OB677/BG90-2.

PI 637003. Oryza sativa L.
Breeding. Pureline. WC 193; 1866; Q 38127. Pedigree - BG66-1/TKM6.

PI 637004. Oryza sativa L.
Breeding. Pureline. WC 194; 1884; Q 38128. Pedigree - IR22/BG90-2.

PI 637005. Oryza sativa L.
Breeding. Pureline. WC 195; 2123; Q 38129.

PI 637006. Oryza sativa L.
Breeding. Pureline. WC 196; 2476; Q 38130. Pedigree - IR2035-290/P1983.

PI 637007. Oryza sativa L.
Breeding. Pureline. WC 197; S7-17; 2485; Q 38131. Pedigree - IR2035-290/P1983.

PI 637008. Oryza sativa L.
Breeding. Pureline. WC 198; 3210; Q 38132. Pedigree - IR2305/IR1818-1-19-2.

PI 637009. Oryza sativa L.
Breeding. Pureline. WC 199; 3555; Q 38133. Pedigree - IR2035-290//IR262/Pelita I-1.

PI 637010. Oryza sativa L.
Breeding. Pureline. WC 200; 5062; Q 38134. Pedigree - Bahagia/BG96-2.

PI 637011. Oryza sativa L.
Breeding. Pureline. WC 204; CT6417-2-1-2-1X; Q 38137. Pedigree - P5555/P4179.

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PI 637012. Oryza sativa L.
Breeding. Pureline. WC 205; PNA 372-f4-3-1; Q 38138. Developed in Peru. Pedigree - INTI/P729-2-2.

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PI 637013. Oryza sativa L.
Breeding. Pureline. WC 206; P 3062-F4-170-1-1-1B; Q 38139. Pedigree - P918-20-2-2-2-1B/P2672.

PI 637014. Oryza sativa L.
Breeding. Pureline. WC 207; P 3621-F2-1-2-7-1B; Q 38140. Pedigree - Metica 1/P2606.

PI 637015. Oryza sativa L.
Breeding. Pureline. WC 208; P 4122-F3-14-4; Q 38141. Pedigree - Metica 1/P2673.

PI 637016. Oryza sativa L.
Breeding. Pureline. WC 209; P 4711-F2-5-5; Q 38142. Pedigree - P2016-F4-87-5/P3958.

PI 637017. Oryza sativa L.
Breeding. Pureline. WC 210; P 4743-F2-14-1; Q 38143. Pedigree - P1274-6-8M-1-3M-1/P4205.

PI 637018. Oryza sativa L.
Breeding. Pureline. WC 211; P 5260-F2-15-3; Q 38144. Pedigree - P2217-F4-30-4/P4205.

PI 637019. Oryza sativa L.
Breeding. Pureline. WC 214; P 5446-6-6-1-13; Q 38147. Pedigree - PI5036/P4983.

PI 637020. Oryza sativa L.
Breeding. Pureline. WC 215; P 5690-4-11-1-1-3X; Q 38148. Pedigree - P5306/Linawang.

PI 637021. Oryza sativa L.
Breeding. Pureline. WC 217; P 5746-18-11-4-1-3X; Q 38150. Pedigree - P5269/Campeche A80.

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PI 637022. Oryza sativa L.
Breeding. Pureline. WC 218; TOX 1858-91-201-1B; Q 38151. Developed in Nigeria. Pedigree - IURON122/BG6810.

PI 637023. Oryza sativa L.
Breeding. Pureline. WC 219; TOX 1859-102-3M; Q 38152. Developed in Nigeria. Pedigree - TOX95//TOX1010-12/TOX1177-14.

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PI 637024. Oryza sativa L.
Breeding. Pureline. WC 220; P 4729-F2-15-3; Q 38153. Pedigree - P2016-F4-87-5/P3989.

PI 637025. Oryza sativa L.
Breeding. Pureline. WC 221; P 4743-F2-65-1; Q 38154. Pedigree - P1274-6-8M-1-3M-1/P4205.

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PI 637026. *Oryza sativa* L.
Breeding. Pureline. WC 222; IR841-63-5-1B; Q 38155. Pedigree - IR262-43-8-11/KDM105.

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PI 637027. *Oryza sativa* L.
Cultivar. Pureline. WC 223; ITA 306; Q 38156. Developed in Nigeria. Pedigree - TOX494-3-6-9-6/TOX711//BG6812.

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PI 637028. *Oryza sativa* L.
Breeding. Pureline. WC 224; P 4034-F3-3-5; Q 38157. Pedigree - CICA8/P3134.

PI 637029. *Oryza sativa* L.
Breeding. Pureline. WC 225; P 4718-F2-5-5; Q 38158. Pedigree - P2026-F4-49-5-5/P4054.

PI 637030. *Oryza sativa* L.
Breeding. Pureline. WC 226; P 4729-F2-5-1; Q 38159. Pedigree - P2016-F4-87-5/P3989.

PI 637031. *Oryza sativa* L.
Breeding. Pureline. WC 227; P 5139-F2-37-2; Q 38160. Pedigree - IR5853-18-2/P4596.

PI 637032. *Oryza sativa* L.
Breeding. Pureline. WC 234; CT6129-12-7-2P; Q 38167. Pedigree - P5611//Colombia 1/M312A-74-2-8-8.

PI 637033. *Oryza sativa* L.
Breeding. Pureline. WC 235; CT6096-7-4-4-3-M; Q 38168. Pedigree - P5555/P1274-6-8M-1-3M-1.

PI 637034. *Oryza sativa* L.
Breeding. Pureline. WC 236; CT6948-8-11P; Q 38169. Pedigree - CT5634/TX1780-2-1-1P-4.

PI 637035. *Oryza sativa* L.
Breeding. Pureline. WC 237; CT7201-16-5P; Q 38170. Pedigree - CT6487/TOX1177-32.

PI 637036. *Oryza sativa* L.
Breeding. Pureline. WC 238; CT7203-2-1P; Q 38171. Pedigree - CT6489//TOX2083/1943-1-1P-1B.

PI 637037. *Oryza sativa* L.
Breeding. Pureline. WC 239; CT7203-6-5P; Q 38172. Pedigree - CT6489//TOX2083/1943-1-1P-1B.

PI 637038. Oryza sativa L.
Breeding. Pureline. WC 241; CT5786-49-4-4-4-M; Q 38174. Pedigree - P4983/P4959.

PI 637039. Oryza sativa L.
Breeding. Pureline. WC 242; CT6919-4-2-2-6; Q 38175. Pedigree - CT6480/BG374-1.

PI 637040. Oryza sativa L.
Breeding. Pureline. WC 244; CT7363-13-5-3; Q 38177. Pedigree - P3085-F4-54/CT6771.

PI 637041. Oryza sativa L.
Breeding. Pureline. WC 245; CT7363-13-5-4; Q 38178. Pedigree - P3085-F4-54/CT6771.

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PI 637042. Oryza sativa L.
Breeding. Pureline. WC 246; IR32429-122-3-1-2; Q 38179. Pedigree - IR1905B-143-2-3/IR9129-209-2-2-2-1.

PI 637043. Oryza sativa L.
Breeding. Pureline. WC 247; IR39422-75-3-3-3-2; Q 38180. Pedigree - IR36843/IR58.

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PI 637044. Oryza sativa L.
Breeding. Pureline. WC 248; CT7415-6-5-2-1X; Q 38181. Pedigree - CT6889/TOX1780-2-1-1P-4.

PI 637045. Oryza sativa L.
Breeding. Pureline. WC 249; CT7415-6-5-2-2X; Q 38182. Pedigree - CT6889/TOX1780-2-1-1P-4.

PI 637046. Oryza sativa L.
Breeding. Pureline. WC 250; CT7415-6-5-2-4X; Q 38183. Pedigree - CT6889/TOX1780-2-1-1P-4.

PI 637047. Oryza sativa L.
Breeding. Pureline. WC 251; CT7415-6-5-3-1X; Q 38184. Pedigree - CT6889/TOX1780-2-1-1P-4.

PI 637048. Oryza sativa L.
Breeding. Pureline. WC 252; CT7415-6-5-3-2X; Q 38185. Pedigree - CT6889/TOX1780-2-1-1P-4.

PI 637049. Oryza sativa L.
Breeding. Pureline. WC 253; CT6946-6-2-2P-1X; Q 38186. Pedigree - CT5633/TOX1780-2-1-1P-3.

PI 637050. *Oryza sativa* L.
Breeding. Pureline. WC 254; CT6129-17-7-9-1; Q 38187. Pedigree - P5611//Colombia 1/M312A-74-2-8-8.

PI 637051. *Oryza sativa* L.
Breeding. Pureline. WC 255; CT6194-16-1-2-3; Q 38188. Pedigree - P5607/BL562-2.

PI 637052. *Oryza sativa* L.
Breeding. Pureline. WC 256; CT8154-1-4-1-M; Q 38189. Pedigree - P5601-12-1-3/P4711-F2-8-6.

PI 637053. *Oryza sativa* L.
Breeding. Pureline. WC 257; CT8154-1-9-2; Q 38190. Pedigree - P5601-12-1-3/P4711-F2-8-6.

PI 637054. *Oryza sativa* L.
Breeding. Pureline. WC 258; CT8159-5-6-3; Q 38191. Pedigree - P5746-18-11-4/P4278-F2-80-4.

PI 637055. *Oryza sativa* L.
Breeding. Pureline. WC 259; CT8163-9-4-1; Q 38192. Pedigree - P5756-3-2-4/P4278-F2-80-4.

PI 637056. *Oryza sativa* L.
Breeding. Pureline. WC 260; CT6919-3-3-4; Q 38193. Pedigree - CT6480/BG374-1.

PI 637057. *Oryza sativa* L.
Breeding. Pureline. WC 261; CT7363-5-3-10; Q 38194. Pedigree - P3085-F4-54/CT6771.

PI 637058. *Oryza sativa* L.
Breeding. Pureline. WC 262; CT7363-8-2-2; Q 38195. Pedigree - P3085-F4-54/CT6771.

PI 637059. *Oryza sativa* L.
Breeding. Pureline. WC 263; CT8154-1-9-1; Q 38196. Pedigree - P5601-12-1-3/P4711-F2-8-6.

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PI 637060. *Oryza sativa* L.
Breeding. Pureline. WC 264; C 48CU76-3-2-1-4-5M; Q 38197. Developed in Mexico. Pedigree - IR2003-P19-27-2-3/IR1615-211-2-1-1CU-1CU.

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PI 637061. *Oryza sativa* L.
Breeding. Pureline. WC 265; CT8154-1-9-3; Q 38198. Pedigree - P5601-12-1-3/P4711-F2-8-6.

PI 637062. *Oryza sativa* L.
Breeding. Pureline. WC 266; CT8163-9-4-4; Q 38199. Pedigree - P5756-3-2-4/P4278-F2-80-4.

PI 637063. *Oryza sativa* L.
Breeding. Pureline. WC 267; CT8447-5-6-3P-1X; Q 38200. Pedigree - CT7296/IR21015-72-3-3-3-1.

PI 637064. *Oryza sativa* L.
Breeding. Pureline. WC 268; CT8451-16-5-1P-1X; Q 38201. Pedigree - CT7299/IR21015-72-3-3-3-1.

PI 637065. *Oryza sativa* L.
Breeding. Pureline. WC 269; CT8455-1-23-7P-1X; Q 38202. Pedigree - CT7301/P3059-F4-79-1.

PI 637066. *Oryza sativa* L.
Breeding. Pureline. WC 273; CT8222-7-6-2P-1X; Q 38206. Pedigree - CT7683/IR21015-72-3-3-3-1.

PI 637067. *Oryza sativa* L.
Breeding. Pureline. WC 274; CT7948-8-4-1P-1X; Q 38207. Pedigree - CT7352/P3084-F4-56-2-2.

PI 637068. *Oryza sativa* L.
Breeding. Pureline. WC 275; CT7948-8-4-1P-2X; Q 38208. Pedigree - CT7352/P3084-F4-56-2-2.

PI 637069. *Oryza sativa* L.
Breeding. Pureline. WC 276; CT8008-3-5-3P-1X; Q 38209. Pedigree - CT7347/IR21015-72-3-3-3-1.

PI 637070. *Oryza sativa* L.
Breeding. Pureline. WC 277; CT8008-3-12-3P-1X; Q 38210. Pedigree - CT7347/IR21015-72-3-3-3-1.

PI 637071. *Oryza sativa* L.
Breeding. Pureline. WC 278; CT8008-16-3-11P-1X; Q 38211. Pedigree - CT7347/IR21015-72-3-3-3-1.

PI 637072. *Oryza sativa* L.
Breeding. Pureline. WC 279; CT8008-16-10-3P-1X; Q 38212. Pedigree - CT7347/IR21015-72-3-3-3-1.

PI 637073. *Oryza sativa* L.
Breeding. Pureline. WC 280; CT8008-16-24-2P-1X; Q 38213. Pedigree - CT7347/IR21015-72-3-3-3-1.

PI 637074. *Oryza sativa* L.
Breeding. Pureline. WC 281; CT8008-16-28-9P-1X; Q 38214. Pedigree - CT7347/IR21015-72-3-3-3-1.

PI 637075. *Oryza sativa* L.
Breeding. Pureline. WC 282; CT8198-4-2-1P-1X; Q 38215. Pedigree - P4516-F2-9-1-1/CT7428.

PI 637076. Oryza sativa L.
Breeding. Pureline. WC 283; CT8198-4-2-3P-1X; Q 38216. Pedigree - P4516-F2-9-1-1-/CT7428.

PI 637077. Oryza sativa L.
Breeding. Pureline. WC 284; CT8198-4-2-6P-1X; Q 38217. Pedigree - P4516-F2-9-1-1-/CT7428.

PI 637078. Oryza sativa L.
Breeding. Pureline. WC 285; CT8220-2-13-2P-1X; Q 38218. Pedigree - CT7683/P3059-F4-25-3.

PI 637079. Oryza sativa L.
Breeding. Pureline. WC 286; CT8220-2-15-2P-1X; Q 38219. Pedigree - CT7683/P3059-F4-25-3.

PI 637080. Oryza sativa L.
Breeding. Pureline. WC 287; CT8220-2-15-7P-1X; Q 38220. Pedigree - CT7683/P3059-F4-25-3.

PI 637081. Oryza sativa L.
Breeding. Pureline. WC 288; CT8220-2-15-7P-2X; Q 38221. Pedigree - CT7683/P3059-F4-25-3.

PI 637082. Oryza sativa L.
Breeding. Pureline. WC 289; CT8220-3-6-2-1X; Q 38222. Pedigree - CT7683/P3059-F4-25-3.

PI 637083. Oryza sativa L.
Breeding. Pureline. WC 291; CT8238-6-14-2P-1X; Q 38224. Pedigree - CT7665/IR21015-72-3-3-3-1.

PI 637084. Oryza sativa L.
Breeding. Pureline. WC 292; CT8240-1-1-3P-1X; Q 38225. Pedigree - CT7666/P3059-F4-79-1.

PI 637085. Oryza sativa L.
Breeding. Pureline. WC 293; CT8240-1-5-2P-1X; Q 38226. Pedigree - CT7666/P3059-F4-79-1.

PI 637086. Oryza sativa L.
Breeding. Pureline. WC 294; CT8248-1-12-2P-1X; Q 38227. Pedigree - CT7668/P2887-F4-9-4.

PI 637087. Oryza sativa L.
Breeding. Pureline. WC 295; CT8249-2-7-3-1X; Q 38228. Pedigree - CT7668/P4278-F2-80-4-1X.

PI 637088. Oryza sativa L.
Breeding. Pureline. WC 296; CT8250-10-4-2P-1X; Q 38229. Pedigree - CT7668/IR21015-72-3-3-3-1.

PI 637089. Oryza sativa L.
Breeding. Pureline. WC 297; CT8250-10-4-4P-1X; Q 38230. Pedigree - CT7668/IR21015-72-3-3-3-1.

PI 637090. Oryza sativa L.
Breeding. Pureline. WC 298; CT8250-12-1-1P-1X; Q 38231. Pedigree - CT7668/IR21015-72-3-3-3-1.

PI 637091. Oryza sativa L.
Breeding. Pureline. WC 300; CT8250-18-4-4P-1X; Q 38233. Pedigree - CT7668/IR21015-72-3-3-3-1.

PI 637092. Oryza sativa L.
Breeding. Pureline. WC 301; CT8250-21-12-2P-1X; Q 38234. Pedigree - CT7668/IR21015-72-3-3-3-1.

PI 637093. Oryza sativa L.
Breeding. Pureline. WC 303; CT8444-1-1-10P-1X; Q 38236. Pedigree - CT7289/IR21015-72-3-3-3-1.

PI 637094. Oryza sativa L.
Breeding. Pureline. WC 304; CT8444-1-8-1P-1X; Q 38237. Pedigree - CT7289/IR21015-72-3-3-3-1.

PI 637095. Oryza sativa L.
Breeding. Pureline. WC 305; CT8444-1-8-11P-1X; Q 38238. Pedigree - CT7289/IR21015-72-3-3-3-1.

PI 637096. Oryza sativa L.
Breeding. Pureline. WC 306; CT8447-5-6-4P-1X; Q 38239. Pedigree - CT7296/IR21015-72-3-3-3-1.

PI 637097. Oryza sativa L.
Breeding. Pureline. WC 307; CT8452-1-23-3P-1X; Q 38240. Pedigree - CT7300/P3059-F4-79-1.

PI 637098. Oryza sativa L.
Breeding. Pureline. WC 308; CT8452-1-23-5P-1X; Q 38241. Pedigree - CT7300/P3059-F4-79-1.

PI 637099. Oryza sativa L.
Breeding. Pureline. WC 310; CT8452-2-10-4P-1X; Q 38242. Pedigree - CT7300/P3059-F4-79-1.

PI 637100. Oryza sativa L.
Breeding. Pureline. WC 311; CT8452-2-10-11P-1X; Q 38243. Pedigree - CT7300/P3059-F4-79-1.

PI 637101. Oryza sativa L.
Breeding. Pureline. WC 312; CT8452-2-27-4P-1X; Q 38244. Pedigree - CT7300/P3059-F4-79-1.

PI 637102. Oryza sativa L.
Breeding. Pureline. WC 314; CT8455-1-24-1P-1X; Q 38246. Pedigree - CT7301/P3059-F4-79-1.

PI 637103. Oryza sativa L.
Breeding. Pureline. WC 317; CT8457-6-16-2-1X; Q 38249. Pedigree - CT7301/IR21015-72-3-3-3-1.

PI 637104. *Oryza sativa* L.
Breeding. Pureline. WC 318; CT8470-15-17-3P-1X; Q 38250. Pedigree - CT7301/P3084-F4-56-2-2.

PI 637105. *Oryza sativa* L.
Breeding. Pureline. WC 319; CT8470-26-9-1P-1X; Q 38251. Pedigree - CT7301/P3084-F4-56-2-2.

PI 637106. *Oryza sativa* L.
Breeding. Pureline. WC 320; CT6163-8-9-3-3; Q 38252. Pedigree - P5551/P1274-6-8M-1-3M-1.

PI 637107. *Oryza sativa* L.
Breeding. Pureline. WC 321; CT8008-3-5-1P-4; Q 38253. Pedigree - CT7347/IR21015-72-3-3-3-1.

PI 637108. *Oryza sativa* L.
Breeding. Pureline. WC 322; CT8240-1-3-4P-4; Q 38254. Pedigree - CT7666/P3059-F4-79-1.

PI 637109. *Oryza sativa* L.
Breeding. Pureline. WC 323; P 1790-5-1M-4-5M-1B-3M-1B; Q 38255. Pedigree - P1247/P1256.

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PI 637110. *Oryza sativa* L.
Breeding. Pureline. WC 324; IA CUBA 19; Q 38256. Developed in Cuba. Pedigree - J104/Century Patna.

PI 637111. *Oryza sativa* L.
Breeding. Pureline. WC 325; IA CUBA 22; Q 38257. Collected in Cuba.

PI 637112. *Oryza sativa* L.
Breeding. Pureline. WC 326; IA CUBA 17; Q 38258. Collected in Cuba. Pedigree - J104/Century Patna.

PI 637113. *Oryza sativa* L.
Breeding. Pureline. WC 327; IA CUBA 23; Q 38259. Collected in Cuba.

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PI 637114. *Oryza sativa* L.
Breeding. Pureline. WC 328; CT10004-4-3-1P-1-2; Q 38260. Pedigree - CT6515-1B-1-3-1-2/CT9396.

PI 637115. *Oryza sativa* L.
Breeding. Pureline. WC 329; CT10344-7-8-2P-2-2; Q 38261. Pedigree - CT9645/CT8159-5-6-3.

PI 637116. *Oryza sativa* L.
Breeding. Pureline. WC 330; CT11014-10-1-2; Q 38262. Pedigree - CT10105/CT8447-5-6-4P-1X.

PI 637117. Oryza sativa L.
Breeding. Pureline. WC 331; CT9497-4-3-1-1-M-4-3P; Q 38263. Pedigree - CT7846/CT5746-18-11-4-1-3X.

PI 637118. Oryza sativa L.
Breeding. Pureline. WC 332; CT10175-5-1-3P-1-3-2P; Q 38264. Pedigree - CT9364/P5413-8-3-5-11-2X.

PI 637119. Oryza sativa L.
Breeding. Pureline. WC 333; CT10323-29-4-1-1-1T-2P; Q 38265. Pedigree - CT9642/CT8154-1-9-2.

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PI 637120. Oryza sativa L.
Breeding. Pureline. WC 334; FB0007-3-1-6-1; Q 38266. Developed in Nigeria. Pedigree - Nato//250-2-2*2/Magnolia.

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PI 637121. Oryza sativa L.
Breeding. Pureline. WC 335; CT9682-2-5-1-2-1; Q 38267. Pedigree - CT9323/P5413-8-3-5-11-2X.

PI 637122. Oryza sativa L.
Breeding. Pureline. WC 336; CT9809-7-1-M-1-1; Q 38268. Pedigree - CT9318/P5166-F2-26-1-1X.

PI 637123. Oryza sativa L.
Breeding. Pureline. WC 337; CT9506-38-5-1P-4PT; Q 38269. Pedigree - CT7769/CT5746-18-11-4-1-3X.

PI 637124. Oryza sativa L.
Breeding. Pureline. WC 338; CT9737-1-1P-2-1; Q 38270. Pedigree - CT8799/P5166-F2-26-1-1X.

PI 637125. Oryza sativa L.
Breeding. Pureline. WC 339; CT9159-18-2-3-1; Q 38271. Pedigree - CT8051/P5746-18-11-2-2-2X.

PI 637126. Oryza sativa L.
Breeding. Pureline. WC 340; CT10335-01-8-1P-4-3P; Q 38272. Pedigree - CT9644/CT8159-5-6-3.

PI 637127. Oryza sativa L.
Breeding. Pureline. WC 341; CT9162-12-6-2-2-1; Q 38273. Pedigree - CT7695/P5746-18-11-2-2-2X.

PI 637128. Oryza sativa L.
Breeding. Pureline. WC 342; CT9509-28-3-3P-M-1; Q 38274. Pedigree - CT77-4/CT5746-18-11-4-1-3X.

PI 637129. *Oryza sativa* L.
Breeding. Pureline. WC 343; CT9506-28-3-3P-M-1-M; Q 38275. Pedigree - CT7769/CT5746-18-11-4-1-3X.

PI 637130. *Oryza sativa* L.
Breeding. Pureline. WC 344; CT9824-9-3-1P-2-M; Q 38276. Pedigree - CT9324/CTCT6047-13-5-3-4-M.

PI 637131. *Oryza sativa* L.
Breeding. Pureline. WC 345; CT11891-2-2-7-M; Q 38277. Pedigree - CT11537/CT10035-43-4-M-3.

PI 637132. *Oryza sativa* L.
Breeding. Pureline. WC 346; CT9155-2-3-1-2M-4-1P; Q 38278. Pedigree - CT8050/P5413-8-3-5-11-2X.

PI 637133. *Oryza sativa* L.
Breeding. Pureline. WC 347; CT9737-8-9-1-1-1P; Q 38279. Pedigree - CT8799/P5166-F2-26-1-1X.

PI 637134. *Oryza sativa* L.
Breeding. Pureline. WC 349; CT9980-25-3-6-CA-1-M; Q 38281. Pedigree - CT6516-23-10-1-2-2/CT9392.

PI 637135. *Oryza sativa* L.
Breeding. Pureline. WC 350; CT10588-CA-1-M; Q 38282. Pedigree - IRGA2342/Diamante.

PI 637136. *Oryza sativa* L.
Breeding. Pureline. WC 351; CT10865-CA-12-M; Q 38283. Pedigree - P5589-1-1-3P-4/CT6743-39-3-2-M-3-M-5-M.

PI 637137. *Oryza sativa* L.
Breeding. Pureline. WC 352; CT10871-1-CA-1-M; Q 38284. Pedigree - CT6515-18-1-3-1-2/Oryzella.

PI 637138. *Oryza sativa* L.
Breeding. Pureline. WC 353; CT11685-7-F4-6-2P-1; Q 38285. Pedigree - CT10801/CT10553.

PI 637139. *Oryza sativa* L.
Breeding. Pureline. WC 354; CT11691-17-F4-1-1P-2; Q 38286. Pedigree - CT10806/CT10555.

PI 637140. *Oryza sativa* L.
Breeding. Pureline. WC 355; CT11696-9-F4-10-2P-3; Q 38287. Pedigree - CT10808/CT10555.

PI 637141. *Oryza sativa* L.
Breeding. Pureline. WC 356; CT11782-2-F4-3-1P-3; Q 38288. Pedigree - CT10689/CT10555.

PI 637142. *Oryza sativa* L.
Breeding. Pureline. WC 357; CT11783-14-F4-1-1P-1; Q 38289. Pedigree - CT10690/CT10552.

PI 637143. Oryza sativa L.
Breeding. Pureline. WC 358; CT11800-22-F4-1-1P-1; Q 38290. Pedigree - CT10826/CT7232-5-3-7-2P.

PI 637144. Oryza sativa L.
Breeding. Pureline. WC 365; CT8008-16-31-3P-M; Q 38297. Pedigree - CT7347/IR21015-72-3-3-3-1.

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PI 637145. Oryza sativa L.
Breeding. Pureline. WC 366; IR65598-27-3-1; Q 38298. Pedigree - Shen Nung 89-366/Genjah Wangkal.

PI 637146. Oryza sativa L.
Breeding. Pureline. WC 367; IR65600-96-1-2-2; Q 38299. Pedigree - Shen Nung 89-366/Ketan Lumbu.

PI 637147. Oryza sativa L.
Breeding. Pureline. WC 368; IR66155-2-1-1-2; Q 38300. Pedigree - Shen Nung 89-366/Padi Buring Gogo.

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PI 637148. Oryza sativa L.
Breeding. Pureline. WC 369; CT9682-2-M-14-1-M-1-3P-M-1; Q 38301. Pedigree - CT9323/P5413-8-3-5-11-2X.

PI 637149. Oryza sativa L.
Breeding. Pureline. WC 370; CT10554-4-4-2-2-M; Q 38302. Pedigree - CT6749-5-1-1-M-3-M-4/P5589-1-1-3P-4.

PI 637150. Oryza sativa L.
Breeding. Pureline. WC 371; CT10166-16-1-2P-1-3; Q 38303. Pedigree - CT10160/P5413-8-3-5-11-2X.

PI 637151. Oryza sativa L.
Breeding. Pureline. WC 372; CT9509-17-3-1-1-M-1-3P-M-1; Q 38304. Pedigree - CT7704/CT5746-18-11-4-1-3X.

PI 637152. Oryza sativa L.
Breeding. Pureline. WC 373; CT10825-1-2-1-3-M; Q 38305. Pedigree - CT6516-23-10-1-2-2/CT6750-9-2-4-M-1-M-1.

PI 637153. Oryza sativa L.
Breeding. Pureline. WC 374; CT11008-12-3-1M-4P-4P; Q 38306. Pedigree - CT10105/CT8285-13-5-2P-1X.

PI 637154. Oryza sativa L.
Breeding. Pureline. WC 375; CT10310-15-3-2P-4-3; Q 38307. Pedigree - CT9639/CT8154-1-9-2.

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PI 637155. Oryza sativa L.
Breeding. Pureline. WC 376; IRGA 234-21-5-6-1; Q 38308. Developed in Brazil. Pedigree - BR IRGA409/P882-2-1B-2-2-2-5.

PI 637156. Oryza sativa L.
Breeding. Pureline. WC 377; IRGA 660-3-13-5-3; Q 38309. Developed in Brazil. Pedigree - IRGA491/IRGA172-F4-SS-39.

PI 637157. Oryza sativa L.
Breeding. Pureline. WC 378; IRGA 659-1-2-2-2; Q 38310. Developed in Brazil. Pedigree - IRGA490/ECIA31-18-11.

PI 637158. Oryza sativa L.
Breeding. Pureline. WC 379; IRGA 411-1-6-1F-A; Q 38311. Developed in Brazil. Pedigree - IRGA315/BR IRGA409.

PI 637159. Oryza sativa L.
Breeding. Pureline. WC 381; IRGA 370-42-1-1F-C-1; Q 38312. Developed in Brazil. Pedigree - Oryzica 1/BR IRGA412.

PI 637160. Oryza sativa L.
Breeding. Pureline. WC 382; IRGA 369-31-2-3F-A1-1; Q 38313. Developed in Brazil. Pedigree - Oryzica 1/BR IRGA409.

PI 637161. Oryza sativa L.
Breeding. Pureline. WC 383; IRGA 440-22-1-3-2; Q 38314. Developed in Brazil. Pedigree - P1356-1-3M-2-1B/BR IRGA412.

PI 637162. Oryza sativa L.
Breeding. Pureline. WC 384; CNAX 5011-9-1-6-4-B; Q 38315. Developed in Brazil. Pedigree - CT7857/P5690-4-11-1-1-3X.

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PI 637163. Oryza sativa L.
Breeding. Pureline. WC 385; CT9882-16-4-2-3-4P-M; Q 38316. Pedigree - IR43/CT7839.

PI 637164. Oryza sativa L.
Breeding. Pureline. WC 386; CT9868-16-3-1-2-3P-M; Q 38317. Pedigree - CT9360/P3844-F3-22-1-1X.

PI 637165. Oryza sativa L.
Breeding. Pureline. WC 387; CT8455-1-13-1-M-2P; Q 38318. Pedigree - CT7301/P3059-F4-79-1.

PI 637166. Oryza sativa L.
Breeding. Pureline. WC 388; CT8665-1-1-1P-4; Q 38319. Pedigree - CT8636/P3059-F4-79-1-1B.

PI 637167. Oryza sativa L.
Breeding. Pureline. WC 389; CT8248-1-12-1P-M-P; Q 38320. Pedigree - CT7668/P2887-F4-9-4.

PI 637168. Oryza sativa L.
Breeding. Pureline. WC 390; CT8452-2-16-3P-M; Q 38321. Pedigree - CT7300/P3059-F4-79-1.

PI 637169. Oryza sativa L.
Breeding. Pureline. WC 391; CT8285-13-4-1P-M; Q 38322. Pedigree - CT5992/P3299-F4-86.

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PI 637170. Oryza sativa L.
Breeding. Pureline. WC 392; PNA 1005-F4-171-3-1; Q 38323. Developed in Peru. Pedigree - INTI/BKNLR75091-CNT-B3.

PI 637171. Oryza sativa L.
Breeding. Pureline. WC 393; ECIA 38-2-4-2-5-6; Q 38324. Developed in Cuba. Pedigree - IR1529-430/P895-7-32.

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PI 637172. Oryza sativa L.
Breeding. Pureline. WC 394; CT10184-2-1-M-1-MI; Q 38325. Pedigree - CT9625/CT8154-1-9-3.

PI 637173. Oryza sativa L.
Breeding. Pureline. WC 395; CT6163-8-9-5-2-M-85-M; Q 38326. Pedigree - P5551/P1274-6-8M-1-3M-1.

PI 637174. Oryza sativa L.
Breeding. Pureline. WC 396; CT8240-1-5-2P-M-1P; Q 38327. Pedigree - CT7666/P3059-F4-79-1.

PI 637175. Oryza sativa L.
Breeding. Pureline. WC 397; P 5746-18-11-1-2-2A-1BRH; Q 38328. Pedigree - P5269/Campeche A80.

PI 637176. Oryza sativa L.
Breeding. Pureline. WC 398; CT11275-3-F4-8P-2; Q 38329. Pedigree - CT10136/CT8222-7-6-2P-1X.

PI 637177. Oryza sativa L.
Breeding. Pureline. WC 399; CT11299-4-F4-18P-4; Q 38330. Pedigree - CT10141/CT8222-7-6-2P-1X.

PI 637178. Oryza sativa L.
Breeding. Pureline. WC 400; CT11280-2-F4-12P-5; Q 38331. Pedigree - CT10137/CT8224-3-5-3P-1X.

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PI 637179. *Oryza sativa* L.
Breeding. Pureline. WC 401; IR61987-51-3-3; Q 38332. Developed in Philippines. Pedigree - IR44626-35-3-3-2/PSB RC10.

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PI 637180. *Oryza sativa* L.
Breeding. Pureline. WC 402; IR62061-89-1-3-2; Q 38333. Pedigree - IR49455-20-2-2-3-3-1/PSB RC10.

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PI 637181. *Oryza sativa* L.
Breeding. Pureline. WC 403; CT8709-4-4-5P-2-M; Q 38334. Pedigree - CT8633/P4711-F2-5-5.

PI 637182. *Oryza sativa* L.
Breeding. Pureline. WC 404; CT8753-6-8-7P-2-M; Q 38335. Pedigree - CT8634/P4711-F2-5-5.

PI 637183. *Oryza sativa* L.
Breeding. Pureline. WC 405; CT9748-3-1-1P-2-M; Q 38336. Pedigree - CT8807/P5166-F2-26-1-1X.

PI 637184. *Oryza sativa* L.
Breeding. Pureline. WC 406; CT11008-12-3-1M-1P-4P; Q 38337. Pedigree - CT10105/CT8285-13-5-2P-1X.

PI 637185. *Oryza sativa* L.
Breeding. Pureline. WC 407; CT9682-M-10-2-M-1-1P; Q 38338. Pedigree - CT9323/P5413-8-3-5-11-2X.

PI 637186. *Oryza sativa* L.
Breeding. Pureline. WC 408; CT8008-16-10-10P-M; Q 38339. Pedigree - CT7347/IR21015-72-3-3-3-1.

PI 637187. *Oryza sativa* L.
Breeding. Pureline. WC 409; CT8008-3-5-8P-M-2P; Q 38340. Pedigree - CT7347/IR21015-72-3-3-3-1.

PI 637188. *Oryza sativa* L.
Breeding. Pureline. WC 410; CT8945-8-17-2T-M; Q 38341. Pedigree - CT8792/P5746-18-11-2-2-2X.

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PI 637189. *Oryza sativa* L.
Breeding. Pureline. WC 411; PR 23613-1-4; Q 38342. Developed in Philippines.

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PI 637190. *Oryza sativa* L.
Breeding. Pureline. WC 412; CT9841-5-2-1P-2I-2I-M; Q 38343. Pedigree - CT9329/P5166-F2-26-1-1X.

PI 637191. *Oryza sativa* L.
Breeding. Pureline. WC 413; CT9748-13-2-1-M-M-1-1; Q 38344. Pedigree - CT8807/P5166-F2-26-1-1X.

PI 637192. *Oryza sativa* L.
Breeding. Pureline. WC 414; CT10491-12-4-2T-3P-1P; Q 38345. Pedigree - CT10097/P3299-F4-33-1B-1X.

PI 637193. *Oryza sativa* L.
Breeding. Pureline. WC 415; CT11030-1-2-2T-1P-1P-3; Q 38346. Pedigree - CT10107/CT8008-3-5-1P-4.

PI 637194. *Oryza sativa* L.
Breeding. Pureline. WC 416; CT11032-2-4-3T-3P-3P-1; Q 38347. Pedigree - CT10108/CT8285-13-5-2P-1X.

PI 637195. *Oryza sativa* L.
Breeding. Pureline. WC 417; CT11260-7-F4-13-4-1X; Q 38348. Pedigree - CT8455-1-23-7P-1X/CT10133.

PI 637196. *Oryza sativa* L.
Breeding. Pureline. WC 418; CT10310-15-9-2P-3-1T-2; Q 38349. Pedigree - CT9639/CT8154-1-9-2.

PI 637197. *Oryza sativa* L.
Breeding. Pureline. WC 419; CT10323-8-2-2P-1-1T-4P; Q 38350. Pedigree - CT9642/CT8154-1-9-2.

PI 637198. *Oryza sativa* L.
Breeding. Pureline. WC 420; CT11026-3-9-1T-2P-3P-1; Q 38351. Pedigree - CT10107/CT8240-1-1-3P-1X.

PI 637199. *Oryza sativa* L.
Breeding. Pureline. WC 421; FB0100-10-1-M; Q 38352. Pedigree - B5117A1-14-2/Chirgua 1-1-22.

PI 637200. *Oryza sativa* L.
Breeding. Pureline. WC 422; CT10175-4-6-2P-2-2; Q 38353. Pedigree - CT9364/P5413-8-3-5-11-2X.

PI 637201. *Oryza sativa* L.
Breeding. Pureline. WC 423; CT10194-5-1-3-2T-1-1; Q 38354. Pedigree - CT9627/CT8159-5-6-3.

PI 637202. *Oryza sativa* L.
Breeding. Pureline. WC 424; CT10240-10-1-2-1T-2-1; Q 38355. Pedigree - CT9635/C48CU76-3-2-1-4-5M.

PI 637203. *Oryza sativa* L.
Breeding. Pureline. WC 425; CT10166-2-1-1T-1C; Q 38356. Pedigree - CT10160/P5413-8-3-5-11-2X.

PI 637204. *Oryza sativa* L.
Breeding. Pureline. WC 426; CT10175-5-10-3P-5-3; Q 38357. Pedigree - CT9364/P5413-8-3-5-11-2X.

PI 637205. *Oryza sativa* L.
Breeding. Pureline. WC 427; CT10244-1-1-1-1T-2-1; Q 38358. Pedigree - CT9636/IR18348-36-3-3.

PI 637206. *Oryza sativa* L.
Breeding. Pureline. WC 428; CT10325-29-4-1-1T; Q 38359. Pedigree - CT9643/CT6047-13-5-3-4-M.

PI 637207. *Oryza sativa* L.
Breeding. Pureline. WC 429; CT10175-6-6-2P-3-M; Q 38360. Pedigree - CT9364/P5413-8-3-5-11-2X.

PI 637208. *Oryza sativa* L.
Breeding. Pureline. WC 430; CT9506-18-7-1T-2; Q 38361. Pedigree - CT7769/CT5746-18-11-4-1-3X.

PI 637209. *Oryza sativa* L.
Breeding. Pureline. WC 431; CT9886-3-1E-1-5-4P; Q 38362. Pedigree - CT5746-18-11-4-1-3X/CT8783.

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PI 637210. *Oryza sativa* L.
Breeding. Pureline. WC 432; IR62140-91-2-2-2-2-3; Q 38363. Pedigree - IR50401-77-2-1-3/IR35366-28-3-1-2-2.

PI 637211. *Oryza sativa* L.
Breeding. Pureline. WC 433; PSB RC-2; Q 38364. Pedigree - IR29469/IR19661-131-1-2.

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PI 637212. *Oryza sativa* L.
Breeding. Pureline. WC 434; CT8285-8-8-2P-M-1P-12; Q 38365. Pedigree - CT5992/P3299-F4-86.

PI 637213. *Oryza sativa* L.
Breeding. Pureline. WC 435; RCN-B-93-083; Q 38366.

PI 637214. Oryza sativa L.
Breeding. Pureline. WC 436; CT10323-16-2-1-1-1; Q 38367. Pedigree - CT9642/CT8154-1-9-2.

PI 637215. Oryza sativa L.
Breeding. Pureline. WC 437; CT9115-4-15-10; CR 2515; Q 38368. Pedigree - CT8304/CT6278-4-14-1X.

PI 637216. Oryza sativa L.
Breeding. Pureline. WC 438; CT9157-3-2-6-2; Q 38369. Pedigree - CT8050/P5746-18-11-2-2-2X.

PI 637217. Oryza sativa L.
Breeding. Pureline. WC 439; CNARR4949-8B-BM85-15-2P; Q 38370. Pedigree - CT8455-1-24-3P-1X/CT10136.

PI 637218. Oryza sativa L.
Breeding. Pureline. WC 440; CT11256-5-F4-28P-5P; Q 38371. Pedigree - CT10133/CT8222-7-6-2P-1X.

PI 637219. Oryza sativa L.
Breeding. Pureline. WC 441; CT11424-14-F4-12P-1P; Q 38372. Pedigree - CT10158/CT8222-7-6-2P-1X.

PI 637220. Oryza sativa L.
Breeding. Pureline. WC 442; CT12908-1-4-9-2-M; Q 38373. Pedigree - CT12201-25-1/CT12245-11-1.

PI 637221. Oryza sativa L.
Breeding. Pureline. WC 443; CT10355-10-4-1T-2P-2P-2; Q 38374. Pedigree - CT9647/P3059-F4-79-1-1B.

PI 637222. Oryza sativa L.
Breeding. Pureline. WC 444; CT11260-11-F4-5P-3; Q 38375. Pedigree - CT8455-1-23-7P-1X/CT10133.

PI 637223. Oryza sativa L.
Breeding. Pureline. WC 445; CT10166-1-1E-3P-6-2-2P-5P; Q 38376. Pedigree - CT10160/P5413-8-3-5-11-2X.

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PI 637224. Oryza sativa L.
Breeding. Pureline. WC 446; CNAX 5013-13-2-2-4-B; Q 38377. Developed in Brazil. Pedigree - CT8782/P5690-4-11-1-1-3X.

The following were developed by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637225. Oryza sativa L.
Breeding. Pureline. WC 447; CNARR4949-8B-BM85-15-1P; Q 38378. Pedigree - CT8455-1-24-3P-1X/CT10136.

PI 637226. Oryza sativa L.
Breeding. Pureline. WC 448; CT9145-4-21-5P-1-MI-F8-3P; Q 38379. Pedigree - CT7857/P5746-18-11-2-2-2X.

PI 637227. Oryza sativa L.
Breeding. Pureline. WC 449; CT11361-17-F4-11P-1P; Q 38380. Pedigree - CT10148/CT8222-7-6-2P-1X.

PI 637228. Oryza sativa L.
Breeding. Pureline. WC 450; CT11369-1-F4-17P-4P; Q 38381. Pedigree - CT10149/CT8222-7-6-2P-1X.

PI 637229. Oryza sativa L.
Breeding. Pureline. WC 451; CT11626-14-4-2-1-M; Q 38382. Pedigree - CT10733/P5589-1-1-3P-4.

PI 637230. Oryza sativa L.
Breeding. Pureline. WC 452; CT10491-12-4-2T-3P-2P-1; Q 38383. Pedigree - CT10097/P3299-F4-33-1B-1X.

PI 637231. Oryza sativa L.
Breeding. Pureline. WC 453; CT10992-3-4-1T-3P-2P-3; Q 38384. Pedigree - CT10092/CT8285-13-5-2P-1X.

PI 637232. Oryza sativa L.
Breeding. Pureline. WC 454; CT11072-2-4-1T-1P-2P-2; Q 38385. Pedigree - CT10112/CT8240-1-3-4P-4.

PI 637233. Oryza sativa L.
Breeding. Pureline. WC 455; CT9992-2-7-2T-2P-3P-3; Q 38386. Pedigree - P5589-1-1-3P-1-1P/CT9395.

PI 637234. Oryza sativa L.
Breeding. Pureline. WC 456; CT8837-1-17-1P-4-M; Q 38387. Pedigree - CT8774/P5746-18-11-2-2-2X.

PI 637235. Oryza sativa L.
Breeding. Pureline. WC 457; CT9868-3-2-3-1-4P-M-1-1P; Q 38388. Pedigree - CT9360/P3844-F3-22-1-1X.

PI 637236. Oryza sativa L.
Breeding. Pureline. WC 458; CT9852-3-2-1-2-F7; Q 38389. Pedigree - P5166-F2-26-1-1X/CT9332.

PI 637237. Oryza sativa L.
Breeding. Pureline. WC 459; CT9509-17-3-1-1-M-1-3P-M-3-3P; Q 38390. Pedigree - CT7704/CT5746-18-11-4-1-3X.

PI 637238. Oryza sativa L.
Breeding. Pureline. WC 460; CT9868-3-2-3-1-4P-M-1-3P; Q 38391. Pedigree - CT9360/P3844-F3-22-1-1X.

PI 637239. Oryza sativa L.
Breeding. Pureline. WC 461; CT9892-6-2-1E-2-M-2-MI; Q 38392. Pedigree - GZ864-2-3-1/CT9355.

PI 637240. Oryza sativa L.
Breeding. Pureline. WC 462; CT10308-27-3-1P-4-3-2P; Q 38393. Pedigree - CT9639/CT6096-7-4-4-3-M.

PI 637241. Oryza sativa L.
Breeding. Pureline. WC 463; CT10532-1-1-2-1-1T-3P; Q 38394. Pedigree - CT9642/CT6047-13-5-3-4-M.

PI 637242. Oryza sativa L.
Breeding. Pureline. WC 464; CT11256-5-F4-28P-1P; Q 38395. Pedigree - CT10133/CT8222-7-6-2P-1X.

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PI 637243. Oryza sativa L.
Breeding. Pureline. WC 465; IR63872-8-3-1-2-1; Q 38396. Pedigree - PSB RC10/IR50350-77-1-2-3-2.

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PI 637244. Oryza sativa L.
Breeding. Pureline. WC 466; IR61009-72-2-3-2; Q 38397. Developed in Philippines. Pedigree - IR52256-84-2-3/IR72.

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PI 637245. Oryza sativa L.
Breeding. Pureline. WC 467; CT13737-5-5-3P-M; Q 38398. Pedigree - CT9162-12-6-2-2-1/CT13396.

PI 637246. Oryza sativa L.
Breeding. Pureline. WC 468; CT12494-14-M-2-2-M; Q 38399. Pedigree - Oryzica 3/CT12389.

PI 637247. Oryza sativa L.
Breeding. Pureline. WC 469; Universidad 3189; Q 38400. Pedigree - CT7347/IR21015-72-3-3-3-1.

PI 637248. Oryza sativa L.
Breeding. Pureline. WC 470; CT9506-38-M-6-1-M-2-1P; Q 38401. Pedigree - CT7769/CT5746-18-11-4-1-3X.

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PI 637249. Oryza sativa L.
Breeding. Pureline. WC 5001; IRAT 194-1-2-B; Q 38402. Developed in Cote D'Ivoire. Pedigree - Dourado Precoce/IAC1246.

PI 637250. Oryza sativa L.
Cultivar. Pureline. "KU 9"; WC 5002; Q 38403. Developed in Thailand.

PI 637251. Oryza sativa L.
Breeding. Pureline. WC 5003; TOX 1010-1; Q 38404. Developed in Nigeria. Pedigree - IRAT13/Dourado 689//TOX494-5.

PI 637252. Oryza sativa L.
Breeding. Pureline. WC 5004; TOX 1010-2-15; Q 38405. Developed in Nigeria. Pedigree - IRAT13/Dourado 689//TOX494-5.

PI 637253. Oryza sativa L.
Breeding. Pureline. WC 5005; TOX 1010-22-7-1B; Q 38406. Developed in Nigeria. Pedigree - IRAT13/Dourado 689//TOX494-5.

PI 637254. Oryza sativa L.
Breeding. Pureline. WC 5006; TOX 1010-24-2-1-1B; Q 38407. Developed in Nigeria. Pedigree - IRAT13/Dourado 689//TOX494-5.

PI 637255. Oryza sativa L.
Breeding. Pureline. WC 5007; TOX 1010-24-6-1-1B; Q 38408. Developed in Nigeria. Pedigree - IRAT13/Dourado 689//TOX494-5.

PI 637256. Oryza sativa L.
Breeding. Pureline. WC 5008; TOX 1010-45-1-1; Q 38409. Developed in Nigeria. Pedigree - IRAT13/Dourado 689//TOX494-5.

PI 637257. Oryza sativa L.
Breeding. Pureline. WC 5009; TOX 1011-4-2; Q 38410. Developed in Nigeria. Pedigree - IRAT13/Dourado 689//TOX490-1.

PI 637258. Oryza sativa L.
Breeding. Pureline. WC 5010; TOX 1177-B; Q 38411. Developed in Nigeria. Pedigree - P36/TOX494.

PI 637259. Oryza sativa L.
Breeding. Pureline. WC 5011; TOX 1177-32; Q 38412. Developed in Nigeria. Pedigree - P36/TOX494.

PI 637260. Oryza sativa L.
Breeding. Pureline. WC 5012; TOX 1768-1-2-2; Q 38413. Developed in Nigeria. Pedigree - TOX1525-F2-DW/Ngovie 20SLR.

PI 637261. Oryza sativa L.
Breeding. Pureline. WC 5013; TOX 1768-1-2-3; Q 38414. Developed in Nigeria. Pedigree - TOX1525-F2-DW/Ngovie 20SLR.

PI 637262. Oryza sativa L.
Breeding. Pureline. WC 5014; TOX 1774-MIX-1; Q 38415. Developed in Nigeria. Pedigree - TOX1525-F2-TALL/TOX1132-F3.

PI 637263. Oryza sativa L.
Breeding. Pureline. WC 5017; TOX 1780-2-1-1P-1; Q 38418. Developed in Nigeria. Pedigree - TOX1525-F2-DW//Norin 6/TOX340-F2.

PI 637264. Oryza sativa L.
Breeding. Pureline. WC 5018; TOX 1780-2-1-1P-2; Q 38419. Developed in Nigeria. Pedigree - TOX1525-F2-DW//Norin 6/TOX340-F2.

PI 637265. Oryza sativa L.
Breeding. Pureline. WC 5019; TOX 1780-2-1-1P-4; Q 38420. Developed in Nigeria. Pedigree - TOX1525-F2-DW//Norin 6/TOX340-F2.

PI 637266. Oryza sativa L.
Breeding. Pureline. WC 5020; TOX 1780-2-1-1P-5; Q 38421. Developed in Nigeria. Pedigree - TOX1525-F2-DW//Norin 6/TOX340-F2.

PI 637267. Oryza sativa L.
Breeding. Pureline. WC 5021; TOX 1780-2-3-201-1; Q 38422. Developed in Nigeria. Pedigree - TOX1525-F2-DW//Norin 6/TOX340-F2.

PI 637268. Oryza sativa L.
Breeding. Pureline. WC 5022; TOX 1780-5-7; Q 38423. Developed in Nigeria. Pedigree - TOX1525-F2-Dw//Norin 6/TOX340-F2.

PI 637269. Oryza sativa L.
Breeding. Pureline. WC 5028; TOX 1851-101-1; Q 38429. Developed in Nigeria. Pedigree - COLL6879//TOX1010-12/TOX1177-14.

PI 637270. Oryza sativa L.
Breeding. Pureline. WC 5029; TOX 1854-MIX-102-3; Q 38430. Developed in Nigeria. Pedigree - COLL5267//TOX1010-12/TOX1177-14.

PI 637271. Oryza sativa L.
Breeding. Pureline. WC 5031; TOX 1859-102-4M-4; Q 38431. Developed in Nigeria. Pedigree - TOX95//TOX1010-12/TOX1177-14.

PI 637272. Oryza sativa L.
Breeding. Pureline. WC 5034; TOX 1859-102-5M-4; Q 38434. Developed in Nigeria. Pedigree - TOX95//TOX1010-12/TOX1177-14.

PI 637273. Oryza sativa L.
Breeding. Pureline. WC 5035; TOX 1859-102-5M-7; Q 38435. Developed in Nigeria. Pedigree - TOX95//TOX1010-12/TOX1177-14.

PI 637274. Oryza sativa L.
Breeding. Pureline. WC 5036; TOX 1859-102-6M-3; Q 38436. Developed in Nigeria. Pedigree - TOX95//TOX1010-12/TOX1177-14.

PI 637275. Oryza sativa L.
Breeding. Pureline. WC 5037; TOX 1871-15-2; Q 38437. Developed in Nigeria. Pedigree - COLL6850/TOX1192-16.

PI 637276. Oryza sativa L.
Breeding. Pureline. WC 5038; TOX 1871-38-2; Q 38438. Developed in Nigeria. Pedigree - COLL6850/TOX1192-16.

PI 637277. Oryza sativa L.
Breeding. Pureline. WC 5039; TOX 2083-1943-1-4; Q 38439. Developed in Nigeria. Pedigree - Diwani/BG6812.

PI 637278. Oryza sativa L.
Breeding. Pureline. WC 5040; TOX 2104-2-1; Q 38440. Developed in Nigeria. Pedigree - TOX504-26-109-1-1/NO 112 (Onne Gru).

PI 637279. Oryza sativa L.
Breeding. Pureline. WC 5041; TOX 906-2-1-202-2-4; Q 38441. Developed in Nigeria. Pedigree - 4445/OS6.

PI 637280. Oryza sativa L.
Breeding. Pureline. WC 5042; TOX 936-81-6-3-IRS-1B; Q 38442. Developed in Nigeria. Pedigree - IR43/Iguape Cateto.

PI 637281. Oryza sativa L.
Breeding. Pureline. WC 5043; TOX 939-107-2-101-1; Q 38443. Developed in Nigeria.

PI 637282. Oryza sativa L.
Breeding. Pureline. WC 5044; TOX 956-109-2-1B; Q 38444. Developed in Nigeria.

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PI 637283. Oryza sativa L.
Breeding. Pureline. WC 5045; CT6241-17-1-1; Q 38445. Pedigree - P5609/COL1XM312A-74-2-8-8.

PI 637284. Oryza sativa L.
Breeding. Pureline. WC 5046; CT6278-3-2-2; Q 38446. Pedigree - P5560/COL1XM312A-74-2-8-8.

PI 637285. Oryza sativa L.
Breeding. Pureline. WC 5047; CT6776-8-9-1; Q 38447. Pedigree - CT5651/CT5630.

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PI 637286. Oryza sativa L.
Breeding. Pureline. WC 5048; TOX 1857-3-4; Q 38448. Developed in Nigeria. Pedigree - IURON122/RP1017-76-1-4-3.

PI 637287. Oryza sativa L.
Breeding. Pureline. WC 5049; TOX 504-26-109-1-3P; Q 38449. Developed in Nigeria. Pedigree - LAC23(Red)/IR523-1-32/TOX7-3-2-3-2/TOX7-3-2-1-1-1-2.

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PI 637288. Oryza sativa L.
Breeding. Pureline. WC 5050; CT6241-11-1-2X; Q 38450. Pedigree - P5609/COL1XM312A-74-2-8-8.

PI 637289. Oryza sativa L.
Breeding. Pureline. WC 5060; CT6241-17-1-1X; Q 38451. Pedigree - P5609/COL1XM312A-74-2-8-8.

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PI 637290. Oryza sativa L.
Breeding. Pureline. WC 5064; CT6261-17-7-3X; Q 38455. Developed in Nigeria. Pedigree - P5610/TOX1785-19-18.

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PI 637291. Oryza sativa L.
Breeding. Pureline. WC 5067; CT6278-3-14-1X; Q 38456. Pedigree - P5560/COL1XM312A-74-2-8-8.

PI 637292. Oryza sativa L.
Breeding. Pureline. WC 5068; CT6278-3-14-5X; Q 38457. Pedigree - P5560/COL1XM312A-74-2-8-8.

PI 637293. Oryza sativa L.
Breeding. Pureline. WC 5069; CT6278-4-14-1X; Q 38458. Pedigree - P5560/COL1XM312A-74-2-8-8.

PI 637294. Oryza sativa L.
Breeding. Pureline. WC 5073; CT6776-7-32-3X; Q 38460. Pedigree - CT5651/CT5630.

PI 637295. Oryza sativa L.
Breeding. Pureline. WC 5208; CT6775-5-17-5-1-10; Q 38583. Pedigree - CT5640/CT5649.

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PI 637296. Oryza sativa L.
Landrace. ACC 77; Cabaysay; Q 38682. Collected in Luzon, Philippines. Latitude 13° 40' N. Longitude 123° 20' E. Camarines Sur.

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PI 637297. Oryza sativa L.
Breeding. Pureline. ACC 301; IR3273-348-1-6; Q 38827. Pedigree - IR8/IR3268B.

PI 637298. Oryza sativa L.
Breeding. Pureline. ACC 365; IR9559-PP-889-1; Q 38873. Pedigree - IR8*3//IR1904/IR1905.

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PI 637299. *Oryza sativa* L.
Cultivar. Pureline. "KHAO SIM"; ACC 453; Q 38932. Collected in Thailand.

PI 637300. *Oryza sativa* L.
Landrace. ACC 676; Remelites; Q 39082. Collected in Mindanao, Philippines. Latitude 7° 30' N. Longitude 122° 25' E. Zamboanga del Sur.

PI 637301. *Oryza sativa* L.
Landrace. ACC 697; Sampopoy; Q 39097. Collected in Panay, Philippines. Latitude 11° 0' N. Longitude 122° 40' E. Iloilo.

PI 637302. *Oryza sativa* L.
Breeding. Pureline. ACC 704; SELECCION 31; Q 39101. Collected in Cuba.

PI 637303. *Oryza sativa* L.
Breeding. Pureline. ACC 709; SELECCION 90; Q 39106. Collected in Cuba.

PI 637304. *Oryza sativa* L.
Breeding. Pureline. ACC 710; SELECCION 103; Q 39107. Collected in Cuba.

PI 637305. *Oryza sativa* L.
Breeding. Pureline. ACC 712; SELECCION 120; Q 39108. Collected in Cuba.

PI 637306. *Oryza sativa* L.
Breeding. Pureline. ACC 713; SELECCION 121; Q 39109. Collected in Cuba.

PI 637307. *Oryza sativa* L.
Breeding. Pureline. ACC 714; SELECCION 123; Q 39110. Collected in Cuba.

PI 637308. *Oryza sativa* L.
Breeding. Pureline. ACC 717; SELECCION 137; Q 39113. Collected in Cuba.

PI 637309. *Oryza sativa* L.
Breeding. Pureline. ACC 718; SELECCION 138; Q 39114. Collected in Cuba.

PI 637310. *Oryza sativa* L.
Breeding. Pureline. ACC 720; SELECCION 143; Q 39116. Collected in Cuba.

PI 637311. *Oryza sativa* L.
Breeding. Pureline. ACC 721; SELECCION 133 A; Q 39117. Collected in Cuba.

PI 637312. *Oryza sativa* L.
Cultivar. Pureline. "TAICHUNG SEN YU 195"; ACC 759; Q 39144. Developed in Taiwan. Pedigree - Bin Tang Chieh/IR661-1-140-3-54.

PI 637313. *Oryza sativa* L.
Cultivar. Pureline. "TAPURIPA"; ACC 766; Q 39149. Developed in Suriname. Pedigree - SML80-5/SML81A.

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PI 637314. Oryza sativa L.
Breeding. Pureline. ACC 768; TAPURIPA MUTANTE 28; Q 39151. Pedigree - mutant in Tapuripa.

PI 637315. Oryza sativa L.
Breeding. Pureline. ACC 769; TAPURIPA MUTANTE 243; Q 39152. Pedigree - mutant in Tapuripa.

PI 637316. Oryza sativa L.
Breeding. Pureline. ACC 777; TETEP MUTANTE 25; Q 39156. Pedigree - mutant in Tetep.

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PI 637317. Oryza sativa L.
Landrace. ACC 779; Tininta; Q 39158. Collected in Palawan, Philippines. Latitude 9° 56' N. Longitude 118° 42' E. Bacungan.

PI 637318. Oryza sativa L.
Cultivar. Pureline. "TJERE MAS"; ACC 781; Q 39159. Collected in Indonesia.

PI 637319. Oryza sativa L.
Cultivar. Pureline. "TOSAHARA MOCHI"; ACC 786; Q 39161. Developed in Japan.

PI 637320. Oryza sativa L.
Breeding. Pureline. ACC 787; TOX 1010-24-17-2; Q 39162. Developed in Nigeria. Pedigree - IRAT13/Dourado 689//TOX494-5.

PI 637321. Oryza sativa L.
Breeding. Pureline. ACC 789; TOX 1010-49-1; Q 39163. Developed in Nigeria. Pedigree - IRAT13/Dourado 689//TOX494-5.

PI 637322. Oryza sativa L.
Breeding. Pureline. ACC 790; TOX 1011-4-1; Q 39164. Developed in Nigeria. Pedigree - IRAT13/Dourado 689//TOX490-1.

PI 637323. Oryza sativa L.
Breeding. Pureline. ACC 793; TOX 1127-11-1; Q 39165. Developed in Nigeria. Pedigree - Norin 6/TOX340.

PI 637324. Oryza sativa L.
Breeding. Pureline. ACC 794; TOX 1177-17-16-B-1CH-1P; Q 39166. Developed in Nigeria. Pedigree - P36/TOX494.

PI 637325. Oryza sativa L.
Breeding. Pureline. ACC 795; TOX 1177-17-16-B-1CH-2P; Q 39167. Developed in Nigeria. Pedigree - P36/TOX494.

PI 637326. *Oryza sativa* L.
Breeding. Pureline. ACC 799; TOX 1780-2-1-1P (2); Q 39169. Developed in Nigeria. Pedigree - TOX1525-F2-DW//Norin 6/TOX340-F2.

PI 637327. *Oryza sativa* L.
Breeding. Pureline. ACC 800; TOX 1780-2-1-2P; Q 39170. Developed in Nigeria. Pedigree - TOX1525-F2-DW//Norin 6/TOX340-F2.

PI 637328. *Oryza sativa* L.
Cultivar. Pureline. ACC 803; ITA 235; Q 39172. Developed in Nigeria. Pedigree - OS6DM/OS6.

PI 637329. *Oryza sativa* L.
Breeding. Pureline. ACC 806; TOX 500-1-112-1; Q 39173. Developed in Nigeria. Pedigree - 63-83/Vijaya/Dourado Precoce/Juma 1.

PI 637330. *Oryza sativa* L.
Breeding. Pureline. ACC 807; TOX 503-1-52-1; Q 39174. Developed in Nigeria. Pedigree - Moroberekan/Rok 1/TOX7-3-2-1-1-1-1/Suakoko 8.

PI 637331. *Oryza sativa* L.
Breeding. Pureline. ACC 808; TOX 503-29-3-1; Q 39175. Developed in Nigeria. Pedigree - Moroberekan/Rok 1/TOX7-3-2-1-1-1-1/Suakoko 8.

PI 637332. *Oryza sativa* L.
Breeding. Pureline. ACC 809; TOX 503-52-1; Q 39176. Developed in Nigeria. Pedigree - Moroberekan/Rok 1/TOX7-3-2-1-1-1-1/Suakoko 8.

PI 637333. *Oryza sativa* L.
Breeding. Pureline. ACC 810; TOX 504-26-109-1-1P; Q 39177. Developed in Nigeria. Pedigree - Lac 23 (Red)/IR528-1-32/TOX7-3-2-3-2/TOX7-3-2-1-1-1-2.

PI 637334. *Oryza sativa* L.
Breeding. Pureline. ACC 811; TOX 504-26-109-12P; Q 39178. Developed in Nigeria. Pedigree - Lac 23 (Red)/IR528-1-32/TOX7-3-2-3-2/TOX7-3-2-1-1-1-2.

PI 637335. *Oryza sativa* L.
Breeding. Pureline. ACC 812; TOX 711F3-6; Q 39179. Developed in Nigeria. Pedigree - IR5/Suakoko 8.

PI 637336. *Oryza sativa* L.
Breeding. Pureline. ACC 813; TOX 711F3-9; Q 39180. Developed in Nigeria. Pedigree - IR5/Suakoko 8.

PI 637337. *Oryza sativa* L.
Breeding. Pureline. ACC 817; TOX 718-1-23; Q 39181. Developed in Nigeria. Pedigree - OS6/IRAT13.

PI 637338. *Oryza sativa* L.
Breeding. Pureline. ACC 821; TOX 95-M; Q 39182. Developed in Nigeria. Pedigree - 63-83/Moroberekan.

PI 637339. *Oryza sativa* L.
Breeding. Pureline. ACC 822; TOX 955-208-2-201; Q 39183. Developed in Nigeria. Pedigree - TOX516/IRAT13.

PI 637340. Oryza sativa L.
Cultivated. Pureline. "VERMELHO COMUN"; ACC 829; Q 39188. Collected in Brazil.

PI 637341. Oryza sativa L.
Breeding. Pureline. ACC 836; YR 1641-GH12-5-1-1CH-4-1; Q 39189. Developed in Korea, South. Pedigree - Milyang 23/YR1547.

The following were developed by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637342. Oryza sativa L.
Breeding. Pureline. ACC 839; 30TV; Q 39192. Pedigree - IR156/Ci Thank Hoa.

PI 637343. Oryza sativa L.
Breeding. Pureline. ACC 840; 411 CRIOLLO; Q 39193.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637344. Oryza sativa L.
Cultivar. Pureline. ACC 843; 90 DIAZ; Q 39194. Collected in Cuba.

PI 637345. Oryza sativa L.
Breeding. Pureline. ACC 846; 1342; Q 39195. Collected in Sri Lanka.

PI 637346. Oryza sativa L.
Breeding. Pureline. ACC 848; 1857; Q 39196. Collected in Sri Lanka.

PI 637347. Oryza sativa L.
Breeding. Pureline. ACC 849; 1862; Q 39197. Collected in Sri Lanka.

The following were developed by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637348. Oryza sativa L.
Breeding. Pureline. ACC 853; 2135; Q 39199. Pedigree - BG90-2//IR1541/OB678.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637349. Oryza sativa L.
Breeding. Pureline. ACC 854; S7-6; Q 39200. Developed in Sri Lanka. Pedigree - IR2035-290//BG90-2/Pelita I-1.

The following were developed by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637350. Oryza sativa L.
Breeding. Pureline. ACC 855; S7-17; Q 39201. Pedigree - IR2035-290//BG90-2/Pelita I-1.

PI 637351. Oryza sativa L.
Breeding. Pureline. ACC 856; 2667; Q 39202. Pedigree - IR262//BKN6809/IR1529.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637352. Oryza sativa L.
Breeding. Pureline. ACC 857; 2698; Q 39203. Developed in Sri Lanka. Pedigree - IR262//BKN6809/IR1529.

The following were developed by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637353. Oryza sativa L.
Breeding. Pureline. ACC 859; 3674; Q 39204. Pedigree - 73-797//BKN6809/IR1529.

PI 637354. Oryza sativa L.
Breeding. Pureline. ACC 860; S13-3; Q 39205. Pedigree - IR262//BKN6809/IR1529.

PI 637355. Oryza sativa L.
Breeding. Pureline. ACC 861; 3835; Q 39206. Pedigree - IR262//BKN6809/IR1529.

PI 637356. Oryza sativa L.
Breeding. Pureline. ACC 862; 3859; Q 39207. Pedigree - IR262//BKN6809/IR1529.

PI 637357. Oryza sativa L.
Breeding. Pureline. ACC 864; 5209; Q 39208. Pedigree - Bahagia/IR262.

PI 637358. Oryza sativa L.
Breeding. Pureline. ACC 869; 5869; Q 39210. Pedigree - P1228/P1253.

PI 637359. Oryza sativa L.
Breeding. Pureline. ACC 871; 7077; Q 39211.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637360. Oryza sativa L.
Cultivar. Pureline. ACC 876; ITA 212; Q 39216. Developed in Nigeria. Pedigree - BG90-2/P1897.

PI 637361. Oryza sativa L.
Breeding. Pureline. ACC 880; 1313; Q 39218. Collected in Sri Lanka.

PI 637362. Oryza sativa L.
Breeding. Pureline. "LIGERITO CORTO PUBECENTE"; ACC 886; Q 39224.

PI 637363. Oryza sativa L.
Cultivar. Pureline. "HAIKONGPAU"; ACC 888; Q 39226. Collected in Japan.

PI 637364. Oryza sativa L.
Breeding. Pureline. ACC 889; 1893; Q 39227. Collected in Sri Lanka.

PI 637365. Oryza sativa L.
Breeding. Pureline. ACC 890; 1188; Lahy; Q 39228. Collected in Madagascar.

PI 637366. Oryza sativa L.
Breeding. Pureline. ACC 891; 1843; Q 39229. Collected in Sri Lanka.

PI 637367. Oryza sativa L.
Breeding. Pureline. ACC 893; BKN 6809; Q 39230. Developed in Thailand. Pedigree - CNT3176/W1256//RD2.

PI 637368. Oryza sativa L.
Breeding. Pureline. ACC 894; 1884; BG 100; Q 39231. Developed in Sri Lanka. Pedigree - IR22/BG90-2.

PI 637369. Oryza sativa L.
Breeding. Pureline. ACC 895; 1724; Q 39232. Developed in Sri Lanka. Pedigree - Pelita I-1//OB678/TKM6.

PI 637370. Oryza sativa L.
Cultivar. Pureline. "ALTAMIRA 7"; ACC 899; Q 39234. Developed in Nicaragua. Pedigree - CICA4/P1889.

PI 637371. Oryza sativa L.
Breeding. Pureline. ACC 900; YR 1805-17-3-2; Q 39235. Developed in Korea, South. Pedigree - YR1616/YR1622.

The following were developed by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637372. Oryza sativa L.
Breeding. Pureline. ACC 901; P 1390-1-1M-2-1B; Q 39236. Pedigree - P1221/P1249.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637373. Oryza sativa L.
Breeding. Pureline. ACC 905; K 1; Q 39239. Developed in Japan. Pedigree - Kinki 15/Pi 1.

PI 637374. Oryza sativa L.
Cultivar. Pureline. "COLONIA MACIAS 5"; ACC 911; Q 39241. Developed in Argentina. Pedigree - L.P. Gualeyan F.A./Dawn.

PI 637375. Oryza sativa L.
Cultivar. Pureline. "EMPASC 100"; ACC 921; Q 39250. Developed in Brazil. Pedigree - IAC435/Taichung 24.

The following were developed by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637376. Oryza sativa L.
Breeding. Pureline. ACC 924; KHAO LOxIR 8; 46CIATGB; Q 39252. Pedigree - Khao Lo/IR8.

PI 637377. Oryza sativa L.
Breeding. Pureline. ACC 930; 5685; Q 39253. Pedigree - P1217/P1232.

PI 637378. Oryza sativa L.
Breeding. Pureline. ACC 931; P 2026F4-49-5-5; Q 39254. Pedigree - BG90-2/P1890.

PI 637379. Oryza sativa L.
Breeding. Pureline. ACC 934; P 2067F7-15511-3; Q 39255.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637380. Oryza sativa L.
Breeding. Pureline. ACC 936; IRAT 15; Q 39256. Developed in Mali. Pedigree - HGK98/Kading Thang.

The following were developed by International Rice Research Institute, P.O. Box 3127, Makati Central Post Office, Makati City, Luzon 1271, Philippines. Donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637381. Oryza sativa L.
Breeding. Pureline. ACC 938; IR5929-12-2; Q 39257. Pedigree - IR5404/MRC172-9.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637382. Oryza sativa L.
Landrace. ACC 940; Minatik; Q 39259. Collected in Bangladesh. Latitude 24° 45' 0" N. Longitude 90° 24' 0" E. Jalchatra, Mymensingh.

PI 637383. Oryza sativa L.
Cultivated. Pureline. "MISARANG GIBBAK"; ACC 941; Q 39260. Collected in Bangladesh.

PI 637384. Oryza sativa L.
Cultivated. Pureline. "JHAM MUMBOY"; ACC 942; Q 39261.

PI 637385. Oryza sativa L.
Breeding. Pureline. ACC 944; CR 133-47; Q 39263. Collected in India.

PI 637386. Oryza sativa L.
Breeding. Pureline. ACC 947; RP 1017-76-1-4-3; Q 39266. Developed in India. Pedigree - Sona/Mahsuri.

PI 637387. Oryza sativa L.
Landrace. ACC 951; Macapno; Q 39270. Collected in Luzon, Philippines. Latitude 18° 10' N. Longitude 120° 45' E. Ilocos Norte.

PI 637388. Oryza sativa L.
Landrace. ACC 952; Saranay; Q 39271. Collected in Luzon, Philippines. Latitude 17° 20' N. Longitude 120° 35' E. Ilocos Sur.

PI 637389. Oryza sativa L.
Cultivar. Pureline. "BIU 1"; ACC 953; Q 39272. Collected in Indonesia.

PI 637390. Oryza sativa L.
Cultivated. Pureline. ACC 954; Khaonew Din; Q 39273. Collected in Myanmar.

PI 637391. Oryza sativa L.
Cultivated. Pureline. ACC 955; Khonu Kyan; Q 39274. Collected in Thailand.

PI 637392. Oryza sativa L.
Cultivated. Pureline. ACC 956; Khaosie; Q 39275. Collected in Myanmar.

PI 637393. Oryza sativa L.
Cultivated. Pureline. "PUNTAS CLARAS CRIOLLO"; ACC 957; Q 39276. Collected in Colombia.

PI 637394. Oryza sativa L.
Cultivar. Pureline. ACC 959; KU 86; Q 39277. Collected in Thailand.

PI 637395. Oryza sativa L.
Breeding. Pureline. ACC 960; J 520; Q 39278. Developed in Dominican Republic. Pedigree - Tanioka//Gigante 8/IR43.

PI 637396. Oryza sativa L.
Landrace. Pureline. ACC 961; ARC 6595; Q 39279. Collected in India.

PI 637397. Oryza sativa L.
Landrace. Pureline. ACC 963; ARC 10016; Q 39281. Collected in India.

PI 637398. Oryza sativa L.
Landrace. Pureline. ACC 964; ARC 10070; Q 39282. Collected in India.

PI 637399. Oryza sativa L.
Landrace. Pureline. ACC 965; ARC 10097; Q 39283. Collected in India.

PI 637400. Oryza sativa L.
Landrace. Pureline. ACC 966; ARC 10552; Q 39284. Collected in India.

PI 637401. Oryza sativa L.
Breeding. Pureline. ACC 967; PNA 623-3; Q 39285. Developed in Peru. Pedigree - PNA46-25-1-3-1/Mamoriaka.

PI 637402. Oryza sativa L.
Cultivated. Pureline. "CAMPO"; ACC 968; Q 39286. Collected in Former Soviet Union.

The following were developed by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637403. Oryza sativa L.
Breeding. Pureline. ACC 969; P 2177F5-48-1; Q 39287. Pedigree - BG90-2/P2007.

PI 637404. Oryza sativa L.
Breeding. Pureline. ACC 970; P 2182F5-49-3; Q 39288. Pedigree - CICA8/P1983.

The following were developed by International Rice Research Institute, P.O. Box 3127, Makati Central Post Office, Makati City, Luzon 1271, Philippines. Donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637405. Oryza sativa L.
Breeding. Pureline. ACC 971; IR1529-430; Q 39289. Pedigree - IR305-3-17-1-3/IR24.

The following were developed by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637406. Oryza sativa L.
Breeding. Pureline. ACC 976; P 2060F5-1-7-4; Q 39291. Pedigree - CICA7/P1916.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637407. Oryza sativa L.
Breeding. Pureline. ACC 978; 8227-7C MR-99-2; Q 39292. Developed in Indonesia.

PI 637408. Oryza sativa L.
Breeding. Pureline. ACC 979; TOX 500-1-110-1; Q 39293. Developed in Nigeria. Pedigree - 63-83/Vijaya/Dourado Precoce/Juma 1.

The following were developed by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637409. Oryza sativa L.
Breeding. Pureline. ACC 982; P 2180F4-7-5; Q 39295. Pedigree - CICA8/P1942.

PI 637410. Oryza sativa L.
Breeding. Pureline. ACC 983; P 3059F4-79-2-3; Q 39296. Pedigree - P1447-3-1M-5-1M-1B/P2672.

PI 637411. Oryza sativa L.
Breeding. Pureline. ACC 985; P 2062F4-17-33-1; Q 39297. Pedigree - CICA7/P1919.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637412. Oryza sativa L.
Breeding. Pureline. ACC 989; CH673-50; Q 39298.

The following were developed by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637413. Oryza sativa L.
Breeding. Pureline. ACC 990; P 2786F4-19-7-4; Q 39299. Pedigree - IR532-1-33/P2610.

PI 637414. Oryza sativa L.
Breeding. Pureline. ACC 991; P 2231F4-138-6; Q 39300. Pedigree - CICA7/P1970.

PI 637415. Oryza sativa L.
Breeding. Pureline. ACC 992; P 2766F4-36-2-4; Q 39301. Pedigree - S7-6/P2609.

PI 637416. Oryza sativa L.
Breeding. Pureline. ACC 993; P 2189F4-64-5; Q 39302. Pedigree - CICA8/P1985.

PI 637417. Oryza sativa L.
Breeding. Pureline. ACC 995; P 2231F4-138-2-1-1; Q 39303. Pedigree - CICA7/P1970.

PI 637418. Oryza sativa L.
Breeding. Pureline. ACC 996; LINEA 4440; Q 39304. Pedigree - CICA4/P888.

PI 637419. Oryza sativa L.
Breeding. Pureline. ACC 998; P 2217F4-45-7; Q 39305. Pedigree - CICA7/P1969.

PI 637420. Oryza sativa L.
Breeding. Pureline. ACC 999; P 2053F4-164-8-1; Q 39306. Pedigree - CICA7/P1908.

PI 637421. Oryza sativa L.
Breeding. Pureline. ACC 1006; P 1036-9-3-1-3-2M; Q 39307. Pedigree - P999/P998.

PI 637422. Oryza sativa L.
Breeding. Pureline. ACC 1015; QUILA 66505; Q 39310.

PI 637423. Oryza sativa L.
Breeding. Pureline. ACC 1017; QUILA 67303; Q 39312.

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PI 637424. Oryza sativa L.
Breeding. Pureline. ACC 1018; C20CU74-5M1-5-1-1-10; Q 39313. Developed in Mexico. Pedigree - IR1531-103-2-2-3-1CU/IR841-5-3-1-3-3-1CU.

The following were developed by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637425. Oryza sativa L.
Breeding. Pureline. ACC 1020; QUILA 64130; Q 39314.

PI 637426. Oryza sativa L.
Breeding. Pureline. ACC 1023; QUILA 67201; Q 39316.

PI 637427. Oryza sativa L.
Breeding. Pureline. ACC 1024; QUILA 68210; Q 39317.

PI 637428. Oryza sativa L.
Breeding. Pureline. ACC 1025; QUILA 64008; Q 39318.

PI 637429. Oryza sativa L.
Breeding. Pureline. ACC 1026; S GEN 4440 SEL 1; Q 39319. Pedigree - CICA4/P888.

PI 637430. Oryza sativa L.
Breeding. Pureline. ACC 1027; QUILA 67103; Q 39320. Pedigree - Diamante/Niquen.

PI 637431. Oryza sativa L.
Breeding. Pureline. ACC 1028; QUILA 61303; Q 39321.

PI 637432. Oryza sativa L.
Breeding. Pureline. ACC 1030; QUILA 67114; Q 39323.

PI 637433. Oryza sativa L.
Breeding. Pureline. ACC 1031; QUILA 66501; Q 39324.

PI 637434. Oryza sativa L.
Breeding. Pureline. ACC 1032; QUILA 64117; Q 39325. Pedigree - Delta/Oro.

PI 637435. Oryza sativa L.
Breeding. Pureline. ACC 1033; QUILA 64112; Q 39326.

PI 637436. Oryza sativa L.
Breeding. Pureline. ACC 1035; QUILA 68207; Q 39327.

PI 637437. Oryza sativa L.
Breeding. Pureline. ACC 1036; QUILA 66304; Q 39328. Pedigree - Cesariot/Oro.

PI 637438. *Oryza sativa* L.
Breeding. Pureline. ACC 1044; LL-5; Q 39333.

PI 637439. *Oryza sativa* L.
Breeding. Pureline. ACC 1050; P 3059-F4-87-2-2; Q 39337. Pedigree - P1447-3-1M-5-1M-1B/P2672.

PI 637440. *Oryza sativa* L.
Breeding. Pureline. ACC 1051; P 3062-F4-38-1-1; Q 39338. Pedigree - P918-20-2-2-2-1B/P2672.

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PI 637441. *Oryza sativa* L.
Breeding. Pureline. ACC 1062; TOX 1871-38-4; Q 39341. Pedigree - Coll 6850/Tox1192-16.

PI 637442. *Oryza sativa* L.
Breeding. Pureline. ACC 1065; TOX 1780-2-1-1P-3; Q 39342. Developed in Nigeria. Pedigree - TOX1525-F2-DW//Norin 6/TOX340-F2.

PI 637443. *Oryza sativa* L.
Breeding. Pureline. ACC 1069; TOX 936-81-3-5-201-1B; Q 39343. Developed in Nigeria. Pedigree - IR43/Iguape Cateto.

PI 637444. *Oryza sativa* L.
Breeding. Pureline. ACC 1070; TOX 891-212-2-102-2-101-1-1B; Q 39344. Developed in Nigeria. Pedigree - IR8230-12-1/LAC23(white).

PI 637445. *Oryza sativa* L.
Breeding. Pureline. ACC 1072; TOX 1010-24-6-1B; Q 39345. Developed in Nigeria. Pedigree - IRAT13/Dourado 689//TOX494-5.

PI 637446. *Oryza sativa* L.
Breeding. Pureline. ACC 1074; TOX 1815-34-201-201-1; Q 39347. Developed in Nigeria. Pedigree - BG6852/TOX475-SLR.

PI 637447. *Oryza sativa* L.
Breeding. Pureline. ACC 1076; TOS 5790; Q 39348. Collected in Nigeria.

PI 637448. *Oryza sativa* L.
Breeding. Pureline. ACC 1081; CA810023; Q 39351.

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PI 637449. *Oryza sativa* L.
Breeding. Pureline. ACC 1082; P 3085-F4-54; Q 39352. Pedigree - P1496-7-7M-5-3M-1B/P2624.

PI 637450. *Oryza sativa* L.
Breeding. Pureline. ACC 1083; P 2054-F4-26-4; Q 39353. Pedigree - IR36/P1909.

PI 637451. Oryza sativa L.
Breeding. Pureline. ACC 1085; P 3059-F4-91-2; Q 39354. Pedigree - P1447-3-1M-5-1M-1B/P2672.

PI 637452. Oryza sativa L.
Breeding. Pureline. ACC 1086; P 2859-F4-97-6; Q 39355. Pedigree - CICA4/P2618.

PI 637453. Oryza sativa L.
Breeding. Pureline. ACC 1088; P 3081-F4-58-3; Q 39356. Pedigree - CICA4/P2624.

PI 637454. Oryza sativa L.
Breeding. Pureline. ACC 1089; P 3059-F4-25-3; Q 39357. Pedigree - P1447-3-1M-5-1M-1B/P2672.

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PI 637455. Oryza sativa L.
Breeding. Pureline. ACC 1090; IR25840-64-1-3; Q 39358. Pedigree - IR21990/IR9129-209-2-2.

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PI 637456. Oryza sativa L.
Breeding. Pureline. ACC 1092; P 3304-F4-5; Q 39360. Pedigree - Oryzica 1/P3129.

PI 637457. Oryza sativa L.
Breeding. Pureline. ACC 1093; P 2231-F4-13-2-1; Q 39361. Pedigree - CICA7/P1970.

PI 637458. Oryza sativa L.
Breeding. Pureline. ACC 1095; P 2867-F4-31-5; Q 39362. Pedigree - BG94-1/P2618.

PI 637459. Oryza sativa L.
Breeding. Pureline. ACC 1099; P 3478-F4-7; Q 39363. Pedigree - Oryzica 1/P1878.

PI 637460. Oryza sativa L.
Breeding. Pureline. ACC 1102; P 3299-F4-86; Q 39365. Pedigree - P1274-6-8M-1-3M-1/P3118.

PI 637461. Oryza sativa L.
Breeding. Pureline. ACC 1103; P 3083-F4-61; Q 39366. Pedigree - P1382-2-9M-1-1M-4/P2624.

PI 637462. Oryza sativa L.
Breeding. Pureline. ACC 1111; P 3081-F4-31; Q 39367. Pedigree - CICA4/P2624.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637463. Oryza sativa L.
Breeding. Pureline. ACC 1112; TAINAN 100-12; Q 39368. Developed in Taiwan.

The following were developed by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637464. Oryza sativa L.
Breeding. Pureline. ACC 1116; P 2058F4-47-3-1B; Q 39372. Pedigree - CICA7/P1914.

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PI 637465. Oryza sativa L.
Breeding. Pureline. ACC 1119; IG2060; Q 39373.

PI 637466. Oryza sativa L.
Breeding. Pureline. ACC 1120; TOX 1815-34-201-201-10; Q 39374. Developed in Nigeria. Pedigree - BG6852/TOX475-SLR.

PI 637467. Oryza sativa L.
Breeding. Pureline. ACC 1121; TOS 7550; Q 39375. Collected in Cote D'Ivoire.

PI 637468. Oryza sativa L.
Breeding. Pureline. ACC 1122; F 10 T1-218; Q 39376.

PI 637469. Oryza sativa L.
Breeding. Pureline. ACC 1125; PNA 343-F4-440-1; Q 39379. Developed in Peru. Pedigree - IR1721-14-6-4-2/INTI.

PI 637470. Oryza sativa L.
Breeding. Pureline. ACC 1126; PNA 343-F4-446-2-3; Q 39380. Developed in Peru. Pedigree - IR1721-14-6-4-2/INTI.

PI 637471. Oryza sativa L.
Breeding. Pureline. ACC 1127; PNA 343-F4-446-2-4; Q 39381. Developed in Peru. Pedigree - IR1721-14-6-4-2/INTI.

PI 637472. Oryza sativa L.
Breeding. Pureline. ACC 1128; PNA 343-F4-446-1-3; Q 39382. Developed in Peru. Pedigree - IR1721-14-6-4-2/INTI.

PI 637473. Oryza sativa L.
Breeding. Pureline. ACC 1129; PNA 343-F4-346-1; Q 39383. Developed in Peru. Pedigree - IR1721-14-6-4-2/INTI.

PI 637474. Oryza sativa L.
Breeding. Pureline. ACC 1131; PNA 343-F4-232-1; Q 39385. Developed in Peru. Pedigree - IR1721-14-6-4-2/INTI.

PI 637475. Oryza sativa L.
Breeding. Pureline. ACC 1132; PNA 343-F4-517-1-2; Q 39386. Developed in Peru. Pedigree - IR1721-14-6-4-2/INTI.

PI 637476. Oryza sativa L.
Breeding. Pureline. ACC 1133; PNA 343-F4-517-1-3; Q 39387. Developed in Peru. Pedigree - IR1721-14-6-4-2/INTI.

PI 637477. Oryza sativa L.
Breeding. Pureline. ACC 1134; PNA 314-F4-201-1; Q 39388. Developed in Peru. Pedigree - PNA46-110-3-6-3/P723-6-3-1.

PI 637478. Oryza sativa L.
Breeding. Pureline. ACC 1135; PNA 314-F4-51-1-3; Q 39389. Developed in Peru. Pedigree - PNA46-110-3-6-3/P723-6-3-1.

PI 637479. Oryza sativa L.
Breeding. Pureline. ACC 1136; PNA 314-F4-149-1; Q 39390. Developed in Peru. Pedigree - PNA46-110-3-6-3/P723-6-3-1.

PI 637480. Oryza sativa L.
Breeding. Pureline. ACC 1137; PNA 314-F4-202-1; Q 39391. Developed in Peru. Pedigree - PNA46-110-3-6-3/P723-6-3-1.

PI 637481. Oryza sativa L.
Breeding. Pureline. ACC 1138; PNA 314-F4-140-1; Q 39392. Developed in Peru. Pedigree - PNA46-110-3-6-3/P723-6-3-1.

PI 637482. Oryza sativa L.
Breeding. Pureline. ACC 1139; PNA 372-F4-5-1-3; Q 39393. Developed in Peru. Pedigree - INTI/P729-2-2.

PI 637483. Oryza sativa L.
Breeding. Pureline. ACC 1140; PNA 372-F4-2-1-5; Q 39394. Developed in Peru. Pedigree - INTI/P729-2-2.

PI 637484. Oryza sativa L.
Breeding. Pureline. ACC 1141; PNA 372-F4-3-1-1; Q 39395. Developed in Peru. Pedigree - INTI/P729-2-2.

PI 637485. Oryza sativa L.
Breeding. Pureline. ACC 1142; PNA 372-F4-5-1-2; Q 39396. Developed in Peru. Pedigree - INTI/P729-2-2.

PI 637486. Oryza sativa L.
Breeding. Pureline. ACC 1144; J 282-9-1-6; Q 39397. Developed in Dominican Republic. Pedigree - J212-3/CICA9.

The following were developed by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637487. Oryza sativa L.
Breeding. Pureline. ACC 1145; P 3081-F3-5C-2M-1BC; Q 39398. Pedigree - CICA4/P2624.

PI 637488. Oryza sativa L.
Breeding. Pureline. ACC 1146; P 3282-F3-12C-1C-1BC; Q 39399. Pedigree - CICA7/P3110.

PI 637489. Oryza sativa L.
Breeding. Pureline. ACC 1147; P 3061-F4-5C-1M-1BC; Q 39400. Pedigree - CICA4/P2672.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637490. Oryza sativa L.
Breeding. Pureline. ACC 1151; J 282-17-1-7; Q 39402. Developed in Dominican Republic. Pedigree - J212-3/CICA9.

PI 637491. Oryza sativa L.
Breeding. Pureline. ACC 1193; H 270-85; Q 39411. Developed in Hungary. Pedigree - M71/G70.

PI 637492. Oryza sativa L.
Cultivar. Pureline. "MARATHON"; ACC 1198; Q 39415. Developed in France. Pedigree - induced mutation in Maratelli.

PI 637493. Oryza sativa L.
Cultivar. Pureline. "PYGMALION"; ACC 1207; Q 39423.

PI 637494. Oryza sativa L.
Breeding. Pureline. ACC 1212; TX 113; Q 39428.

PI 637495. Oryza sativa L.
Breeding. Pureline. ACC 1213; TX 706; Q 39429.

PI 637496. Oryza sativa L.
Breeding. Pureline. ACC 1214; TX 10438; Q 39430.

PI 637497. Oryza sativa L.
Breeding. Pureline. ACC 1215; TX 10597; Q 39431.

PI 637498. Oryza sativa L.
Breeding. Pureline. ACC 1216; TX 13055; Q 39432.

PI 637499. Oryza sativa L.
Cultivar. Pureline. "GUAPORE"; ACC 1218; Q 39434. Developed in Brazil. Pedigree - IAC47/IRAT13.

PI 637500. Oryza sativa L.
Breeding. Pureline. ACC 1221; CNAX1656-83-5-B; Q 39436. Developed in Brazil. Pedigree - IREM194/Cabacu.

PI 637501. Oryza sativa L.
Breeding. Pureline. ACC 1222; LS-85-158; Q 39437.

The following were developed by International Rice Research Institute, P.O. Box 3127, Makati Central Post Office, Makati City, Luzon 1271, Philippines. Donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637502. Oryza sativa L.
Breeding. Pureline. ACC 1227; IR10120-7-2-1-4; Q 39441. Pedigree - IR9538/IR9575.

The following were developed by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637503. Oryza sativa L.
Breeding. Pureline. ACC 1228; CT6513-7-CA-1-5-369; Q 39442. Pedigree - CT5623/TOX1785-19-18.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637504. Oryza sativa L.
Breeding. Pureline. ACC 1243; IAC 81-176; Q 39455. Developed in Brazil.

PI 637505. Oryza sativa L.
Breeding. Pureline. ACC 1244; AB-204-1; Q 39456.

PI 637506. Oryza sativa L.
Breeding. Pureline. ACC 1245; CHIAPAS 4-84; Q 39457. Developed in Mexico. Pedigree - Y-3/R2-111//MLE.

PI 637507. Oryza sativa L.
Breeding. Pureline. ACC 1246; TOX 1177-13B-2CN-1JU; Q 39458. Developed in Nigeria. Pedigree - P36/TOX494.

The following were developed by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637508. Oryza sativa L.
Breeding. Pureline. ACC 1248; CT6741-15-CA-18; Q 39459. Pedigree - CT6286/CH651-1-3.

PI 637509. Oryza sativa L.
Breeding. Pureline. ACC 1256; CT9586-283-CA1; Q 39465. Pedigree - CT6241-17-1-5-1/Oryzica 1.

PI 637510. Oryza sativa L.
Breeding. Pureline. ACC 1257; CT9586-14PL48-CA7; Q 39466. Pedigree - CT6241-17-1-5-1/Oryzica 1.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637511. Oryza sativa L.
Cultivar. Pureline. "TANGARA"; ACC 1259; Q 39468. Developed in Brazil. Pedigree - IRAT13/IAC25.

PI 637512. Oryza sativa L.
Breeding. Pureline. ACC 1260; CNAX28-2-1; 660018; Q 39469. Developed in Brazil. Pedigree - Kanan/Bico Ganga.

PI 637513. Oryza sativa L.
Breeding. Pureline. ACC 1261; CNAX56208; Q 39470. Developed in Brazil.

PI 637514. Oryza sativa L.
Breeding. Pureline. ACC 1262; IREM 873-2; Q 39471.

PI 637515. Oryza sativa L.
Breeding. Pureline. ACC 1263; CNA 515-11-B-2; Q 39472. Developed in Brazil.

PI 637516. Oryza sativa L.
Cultivar. Pureline. "INIA TACUARI"; ACC 1284; Q 39485. Developed in Colombia. Pedigree - Newbonnet/Newrex.

PI 637517. Oryza sativa L.
Breeding. Pureline. ACC 1285; IRGA 417; Q 39486. Developed in Brazil. Pedigree - P1377-1-15M-4-1M-1/BR IRGA412.

PI 637518. Oryza sativa L.
Cultivar. Pureline. "EPAGRI 108"; ACC 1290; Q 39491. Developed in Brazil. Pedigree - CT7347/IR21015-72-3-3-3-1.

PI 637519. Oryza sativa L.
Cultivar. Pureline. "EPAGRI 109"; ACC 1291; Q 39492. Developed in Brazil. Pedigree - CT7347/IR21015-72-3-3-3-1.

PI 637520. Oryza sativa L.
Cultivar. Pureline. "JAMAE"; ACC 1292; Q 39493.

PI 637521. Oryza sativa L.
Cultivar. Pureline. ACC 1298; EMBRAPA 7 TAIM; Q 39499. Developed in Brazil.

The following were donated by Kazutoshi Okuno, National Institute of Agrobiological, Resources (NIAR), Tsukuba, Ibaraki 305, Japan. Received 06/04/1999.

PI 637522. Oryza sativa L.
Cultivar. Pureline. "KITAHIKARI"; "YD2-1605"; 00005881; ISRUCGR 064; HOKKAIDO; Q 39725. Developed in Japan. Pedigree - Shiokari/Yukara.

PI 637523. Oryza sativa L.
Cultivar. Pureline. "TOMOYUTAKA"; "YD2-1695"; 00037858; ISRUCGR 065; Q 39726. Developed in Japan. Pedigree - Matsumae/Ishikari.

PI 637524. Oryza sativa L.
Cultivar. Pureline. "SASAMINORI"; 00006745; Q 39728. Developed in Japan. Pedigree - Sasanishiki/OU239.

PI 637525. Oryza sativa L.
Cultivar. Pureline. "TAIKANSEI URUCHI"; 00008365; Q 39736. Developed in Japan.

PI 637526. Oryza sativa L.
Breeding. Pureline. "Satukei 8626A"; 00054363; Tokyo; Q 39737.

PI 637527. Oryza sativa L.
Cultivar. Pureline. "MATSUMAE"; 00005882; Q 39738. Developed in Japan. Pedigree - Yoneshiro/Hokkai 183.

PI 637528. Oryza sativa L.
Breeding. Pureline. "A"; 00006381; Q 39739. Developed in Japan.

PI 637529. Oryza sativa L.
Cultivar. Pureline. "KURIKARA MOCHI"; 00008154; Q 39740. Developed in Japan.

PI 637530. Oryza sativa L.
Cultivar. Pureline. "YUKIHIKARI"; 00037859; Q 39742. Developed in Japan. Pedigree - Kitahikari/Tomoemasari//Kuuiku 99.

PI 637531. Oryza sativa L.
Breeding. Pureline. "Satukei 8626B"; 00054364; Hokkaido; Q 39743.

PI 637532. Oryza sativa L.
Breeding. Pureline. "Satukei 8632"; 00054371; Hokkaido; Q 39744.

PI 637533. Oryza sativa L.
Breeding. Pureline. "Satukei 8651"; 00054381; Hokkaido; Q 39745.

PI 637534. Oryza sativa L.
Cultivar. Pureline. "KANTOU 78"; 00005548; Q 39746. Developed in Japan.

PI 637535. Oryza sativa L.
Cultivar. Pureline. "KANTOU MOCHI 110"; 00005572; Q 39747. Developed in Japan.

PI 637536. Oryza sativa L.
Cultivar. Pureline. "HOKKAIDOU WASE"; 00006067; Choukan; Q 39748. Developed in Japan.

PI 637537. Oryza sativa L.
Cultivar. Pureline. "DAIKOKU WASE"; 00006357; Q 39749. Developed in Japan.

PI 637538. Oryza sativa L.
Cultivar. Pureline. "NIIBORI WASE"; 00006487; Q 39750. Developed in Japan.

PI 637539. Oryza sativa L.
Cultivar. Pureline. "HOKKOU"; 00007679; Q 39751. Developed in Japan.

PI 637540. Oryza sativa L.
Cultivar. Pureline. "NAKATE SHIROGE 1"; 00007991; Q 39752. Developed in Japan.

PI 637541. Oryza sativa L.
Cultivar. Pureline. "HOKKAIDOU MOCHI"; 00008118; Q 39753. Developed in Japan.

PI 637542. Oryza sativa L.
Breeding. Pureline. "Satukei 8627"; 00054365; Hokkaido; Q 39756.

PI 637543. Oryza sativa L.
Cultivar. Pureline. "KANTOU MOCHI 89"; 00087391; Q 39757. Developed in Japan.

PI 637544. Oryza sativa L.
Cultivar. Pureline. "TAMASARI C"; 00004798; Q 39759. Developed in Japan.

PI 637545. Oryza sativa L.
Cultivar. Pureline. "TAMASARI B"; 00004946; Q 39761. Developed in Japan.

PI 637546. Oryza sativa L.
Cultivar. Pureline. "WASE SEKITORI G"; 00004974; Q 39762. Developed in Japan.

PI 637547. Oryza sativa L.
Cultivar. Pureline. "NABEWARI"; 00005020; Q 39763. Developed in Japan.

PI 637548. Oryza sativa L.
Cultivar. Pureline. "NOURIN MOCHI 25"; 00005182; Norin Mochi 25; Q 39765. Developed in Japan.

PI 637549. Oryza sativa L.
Cultivar. Pureline. "OOTAMA"; 00005295; Q 39766. Developed in Japan.

PI 637550. Oryza sativa L.
Cultivar. Pureline. "TOGA"; 00005296; Kanto toz; Q 39767. Collected in Japan.

PI 637551. Oryza sativa L.
Cultivar. Pureline. "TOUKYOU KANEKO"; 00005329; Q 39768. Collected in Tokyo, Japan.

PI 637552. Oryza sativa L.
Cultivar. Pureline. "KANTOU MOCHI 83"; 00005552; Q 39771. Developed in Japan.

PI 637553. Oryza sativa L.
Cultivar. Pureline. "KANTOU 93"; 00005557; Q 39772. Developed in Japan.

PI 637554. Oryza sativa L.
Cultivar. Pureline. "KANTOU MOCHI 103"; 00005565; Q 39773. Developed in Japan.

PI 637555. Oryza sativa L.
Cultivar. Pureline. "KANTOU MOCHI 104"; 00005566; Q 39774. Developed in Japan.

PI 637556. Oryza sativa L.
Cultivar. Pureline. "KANTOU MOCHI 107"; 00005569; Q 39776. Developed in Japan.

PI 637557. Oryza sativa L.
Cultivar. Pureline. "KANTOU MOCHI 122"; 00005582; Q 39780. Developed in Japan.

PI 637558. Oryza sativa L.
Cultivar. Pureline. "KANTOU MOCHI 123"; 00005583; Q 39781. Developed in Japan.

PI 637559. Oryza sativa L.
Cultivar. Pureline. "ISHIOKA 4"; 00005587; Q 39782. Developed in Japan.

PI 637560. Oryza sativa L.
Cultivar. Pureline. "ISHIOKA MOCHI 7"; 00005589; Q 39783. Developed in Japan.

PI 637561. Oryza sativa L.
Cultivar. Pureline. "ISHIOKA MOCHI 11"; 00005593; Q 39784. Developed in Japan.

PI 637562. Oryza sativa L.
Cultivar. Pureline. "ISHIOKA MOCHI 14"; 00005596; Q 39785. Developed in Japan.

PI 637563. Oryza sativa L.
Cultivar. Pureline. "TOYOHATA MOCHI"; 00005629; Q 39786. Developed in Japan.

PI 637564. Oryza sativa L.
Cultivar. Pureline. "KANTOU MOCHI 127"; 00005632; Q 39787. Developed in Japan.

PI 637565. Oryza sativa L.
Cultivar. Pureline. "TOUKAI 30"; 00005661; Q 39788. Developed in Japan.

PI 637566. Oryza sativa L.
Cultivar. Pureline. "SANIN 14"; 00005682; Q 39789. Developed in Japan.

PI 637567. Oryza sativa L.
Cultivar. Pureline. "DANGO MOCHI 2"; 00005725; Q 39791. Developed in Japan.

PI 637568. Oryza sativa L.
Cultivar. Pureline. "TENJINDOU"; 00005990; Q 39793. Developed in Japan.

PI 637569. Oryza sativa L.
Cultivar. Pureline. "SHINANO MOCHI 60"; 00006123; Q 39797. Developed in Japan.

PI 637570. Oryza sativa L.
Cultivar. Pureline. "OUU 23"; 00006210; Q 39800. Developed in Japan.

PI 637571. Oryza sativa L.
Breeding. Pureline. "B"; 00006340; Q 39801. Developed in Japan.

PI 637572. Oryza sativa L.
Breeding. Pureline. "Ab/G"; 00006349; Q 39802. Developed in Japan.

PI 637573. Oryza sativa L.
Cultivar. Pureline. "BONSAI DAIKOKU"; 00006394; Q 39804. Developed in Japan.

PI 637574. Oryza sativa L.
Cultivar. Pureline. "GOKUWASE AIKOKU"; 00006465; Q 39806. Developed in Japan.

PI 637575. Oryza sativa L.
Cultivar. Pureline. "KAMAGADAI WASE"; 00006479; Q 39807. Developed in Japan.

PI 637576. Oryza sativa L.
Cultivar. Pureline. "NAKATE EIKOU"; 00007447; Q 39810. Developed in Japan.

PI 637577. Oryza sativa L.
Cultivar. Pureline. "BENIHIKARI"; 00007455; Q 39812. Developed in Japan.

PI 637578. Oryza sativa L.
Cultivar. Pureline. "IPPON MOCHI"; 00007674; Q 39813. Developed in Japan.

PI 637579. Oryza sativa L.
Cultivar. Pureline. "HOMURA 3"; 00007716; Q 39814. Developed in Japan.

PI 637580. Oryza sativa L.
Cultivar. Pureline. "OOTA NISHIKI"; 00007750; Q 39815. Developed in Japan.

PI 637581. Oryza sativa L.
Cultivar. Pureline. "AKISHI 2"; 00007771; Q 39816. Developed in Japan.

PI 637582. Oryza sativa L.
Cultivar. Pureline. "AIKOKU IBARAGI 2"; 00007835; Q 39818. Developed in Japan.

PI 637583. Oryza sativa L.
Cultivar. Pureline. "ODA CHINKOU"; 00007882; Q 39819. Developed in Japan.

PI 637584. Oryza sativa L.
Cultivar. Pureline. "IMADA MOCHI"; 00007894; Q 39820. Developed in Japan.

The following were donated by Robert H. Dilday, USDA-ARS, Dale Bumpers National Rice Res. Ctr., 2980 Hwy 130 East, Stuttgart, Arkansas 72160, United States. Received 04/07/1999.

PI 637585. Oryza sativa L.
Cultivar. Pureline. FKR 48; Q 39836. Collected in Cote D'Ivoire. Pedigree - 4418/IR6115-1-1-1.

The following were donated by West Africa Rice Development Association, 01 BP 2551, Bouake, Cote D'Ivoire. Received 04/07/1999.

PI 637586. Oryza sativa L.
Breeding. Pureline. AD 9246; Q 39838. Developed in Kenya. Pedigree - ADT31/AD198.

PI 637587. Oryza sativa L.
Cultivated. Pureline. "CHINNE SHAKAR"; Q 39839. Collected in Nepal.

PI 637588. Oryza sativa L.
Cultivar. Pureline. "CISADANE"; Q 39841. Developed in Indonesia. Pedigree - Pelita I-1//IR989-98-2-3/IR2157-3.

PI 637589. Oryza sativa L.
Cultivar. Pureline. DR 2; Bouake; Q 39842. Developed in Senegal.

PI 637590. Oryza sativa L.
Cultivar. Pureline. FKR 14; 4418; Q 39844. Developed in Burkina Faso. Pedigree - IR685-23-3-1/P894.

PI 637591. Oryza sativa L.
Cultivar. Pureline. "IB 44"; Q 39849. Developed in Burundi.

PI 637592. Oryza sativa L.
Cultivar. Pureline. ITA 123; FKR 28; Q 39852. Developed in Burkina Faso.

PI 637593. Oryza sativa L.
Cultivar. Pureline. ITA 230; FARO 50; Q 39854. Developed in Nigeria. Pedigree - IR262/Badagia.

PI 637594. Oryza sativa L.
Cultivar. Pureline. ITA 252; Q 39855. Developed in Nigeria.

PI 637595. Oryza sativa L.
Cultivar. Pureline. ITA 406; Q 39857. Developed in Nigeria.

PI 637596. Oryza sativa L.
Breeding. Pureline. RF 85C-C1-37-1-1-1-3-1-2; Q 39864.

PI 637597. Oryza sativa L.
Breeding. Pureline. RF85C-C1-37-1-2-2-3; Q 39865.

PI 637598. Oryza sativa L.
Breeding. Pureline. RP 2068-18-2-5; Q 39866. Developed in India. Pedigree - ADT40/Velluthacheera.

PI 637599. Oryza sativa L.
Breeding. Pureline. S 499-B-28; Q 39867. Developed in Indonesia.

PI 637600. Oryza sativa L.
Breeding. Pureline. S 992-F4-2-5-1-B; Q 39868. Developed in Indonesia.

PI 637601. Oryza sativa L.
Cultivar. Pureline. "SIK 123"; Q 39869. Developed in Mali.

PI 637602. *Oryza sativa* L.
Breeding. Pureline. TNAU 7893; Q 39870. Developed in India. Pedigree - Manila/IR22.

PI 637603. *Oryza sativa* L.
Breeding. Pureline. Tox 3050-6-E2-3-4; Q 39871. Developed in Nigeria. Pedigree - TSY285/IR4422-98-3-6-1.

PI 637604. *Oryza sativa* L.
Breeding. Pureline. Tox 3052-46-E2-2-2-3; Q 39872. Developed in Nigeria. Pedigree - IR46/ITA123.

PI 637605. *Oryza sativa* L.
Breeding. Pureline. Tox 3058-28-1-1; Wita 9; Q 39874. Developed in Nigeria. Pedigree - IR2042-178-1/CT19.

PI 637606. *Oryza sativa* L.
Breeding. Pureline. Tox 3084-137-1-2-3-5-2; Q 39878. Developed in Nigeria. Pedigree - Chakuregi/IR10110-23-1.

PI 637607. *Oryza sativa* L.
Breeding. Pureline. Tox 3093-35-2-3-3-1; Q 39879. Developed in Nigeria. Pedigree - IR42/Suakoko 8.

PI 637608. *Oryza sativa* L.
Breeding. Pureline. Tox 3100-32-2-1-3-5; Wita 3; Q 39880. Developed in Nigeria. Pedigree - 11975/IR13146-45-2-3.

PI 637609. *Oryza sativa* L.
Breeding. Pureline. Tox 3118-6-e2-3-2; Wita 1; Q 39881. Developed in Nigeria. Pedigree - Faro 35/IR13149-19-1.

PI 637610. *Oryza sativa* L.
Breeding. Pureline. Tox 3211-49-1-1-3-2; Q 39882. Developed in Nigeria. Pedigree - CT19/IR2042-178-1//TSY285.

PI 637611. *Oryza sativa* L.
Breeding. Pureline. Tox 3226-5-2-2; Q 39883. Developed in Nigeria. Pedigree - TOX1785-19-18/IR9528-91-2-3//CT19.

PI 637612. *Oryza sativa* L.
Breeding. Pureline. Tox 3226-5-5-2-2-3; Q 39884. Developed in Nigeria. Pedigree - TOX1785-19-18/IR9528-91-2-3//CT19.

PI 637613. *Oryza sativa* L.
Breeding. Pureline. Tox 3241-21-2-2-3-2; Q 39885. Developed in Nigeria. Pedigree - TSY285/Moroberekan//ITA306.

PI 637614. *Oryza sativa* L.
Breeding. Pureline. Tox 3241-22-3-3-3; Q 39886. Developed in Nigeria. Pedigree - TSY285/Moroberekan//ITA306.

PI 637615. *Oryza sativa* L.
Breeding. Pureline. Tox 3241-31-2-1-3-1; Q 39887. Developed in Nigeria. Pedigree - TSY285/Moroberekan//ITA306.

PI 637616. Oryza sativa L.
Breeding. Pureline. Tox 3245-32-2-2-2-2; Q 39889. Developed in Nigeria.

PI 637617. Oryza sativa L.
Breeding. Pureline. Tox 3249-49-2-3-2; Q 39890. Developed in Nigeria.

PI 637618. Oryza sativa L.
Breeding. Pureline. Tox 3264-78-3-1-1-1; Q 39891. Developed in Nigeria.

PI 637619. Oryza sativa L.
Breeding. Pureline. Tox 3370-54-3-1-2; Q 39893. Developed in Nigeria.

PI 637620. Oryza sativa L.
Breeding. Pureline. Tox 3388-1121-1-1-1-2; Q 39894. Developed in Nigeria.

PI 637621. Oryza sativa L.
Breeding. Pureline. Tox 3388-112-1-1-1-2; Q 39895. Developed in Nigeria.

PI 637622. Oryza sativa L.
Breeding. Pureline. Tox 3413-199-12-2-1; Q 39896. Developed in Nigeria.

PI 637623. Oryza sativa L.
Breeding. Pureline. Tox 3413-199-1-2-3-2; Q 39897. Developed in Nigeria.

PI 637624. Oryza sativa L.
Breeding. Pureline. Tox 3416-170-2-2-2-2; Q 39898. Developed in Nigeria. Pedigree - ITA306/DG84247.

PI 637625. Oryza sativa L.
Breeding. Pureline. Tox 3422-3-2-5-3-3-2-3; Q 39900. Developed in Nigeria.

PI 637626. Oryza sativa L.
Breeding. Pureline. Tox 3440-132-5-3-1-3-5; Q 39903. Developed in Nigeria. Pedigree - TOX891-212-1-201-1-105/TOX3056-5-1.

PI 637627. Oryza sativa L.
Breeding. Pureline. Tox 3440-16-1-2-1-2; Q 39904. Developed in Nigeria. Pedigree - TOX891-212-1-201-1-105/TOX3056-5-1.

PI 637628. Oryza sativa L.
Breeding. Pureline. Tox 3440-16-1-2-2-1; Q 39905. Developed in Nigeria. Pedigree - TOX891-212-1-201-1-105/TOX3056-5-1.

PI 637629. Oryza sativa L.
Breeding. Pureline. Tox 3440-16-1-2-2-2; Q 39906. Developed in Nigeria. Pedigree - TOX891-212-1-201-1-105/TOX3056-5-1.

PI 637630. Oryza sativa L.
Breeding. Pureline. Tox 3440-16-1-2-2-3; Q 39907. Developed in Nigeria. Pedigree - TOX891-212-1-201-1-105/TOX3056-5-1.

PI 637631. Oryza sativa L.
Breeding. Pureline. Tox 3440-16-2-1-2-1; Q 39909. Developed in Nigeria. Pedigree - TOX891-212-1-201-1-105/TOX3056-5-1.

PI 637632. *Oryza sativa* L.
Breeding. Pureline. Tox 3440-16-2-1-2-3; Q 39910. Developed in Nigeria. Pedigree - TOX891-212-1-201-1-105/TOX3056-5-1.

PI 637633. *Oryza sativa* L.
Breeding. Pureline. Tox 3440-16-2-2-1-1-1; Q 39911. Developed in Nigeria. Pedigree - TOX891-212-1-201-1-105/TOX305-5-1.

PI 637634. *Oryza sativa* L.
Breeding. Pureline. Tox 3440-16-2-2-1-2; Q 39912. Developed in Nigeria. Pedigree - TOX891-212-1-201-1-105/TOX3056-5-1.

PI 637635. *Oryza sativa* L.
Breeding. Pureline. Tox 3440-16-3-1-1-3; Q 39915. Developed in Nigeria. Pedigree - TOX891-212-1-201-1-105/TOX3056-5-1.

PI 637636. *Oryza sativa* L.
Breeding. Pureline. Tox 3440-16-3-1-1-3; Q 39916. Developed in Nigeria. Pedigree - TOX891-212-1-201-1-105/TOX3056-5-1.

PI 637637. *Oryza sativa* L.
Breeding. Pureline. Tox 3440-16-3-2-2-1; Q 39917. Developed in Nigeria. Pedigree - TOX891-212-1-201-1-105/TOX3056-5-1.

PI 637638. *Oryza sativa* L.
Breeding. Pureline. Tox 3440-16-3-2-2-3; Q 39918. Developed in Nigeria. Pedigree - TOX891-212-1-201-1-105/TOX3056-5-1.

PI 637639. *Oryza sativa* L.
Breeding. Pureline. Tox 3440-171-1-1-1-1; Wita 7; Q 39919. Developed in Nigeria. Pedigree - TOX891-212-1-201-1-105/TOX3056-5-1.

PI 637640. *Oryza sativa* L.
Breeding. Pureline. Tox 3440-176-1-2-1; Wita 8; Q 39920. Developed in Nigeria. Pedigree - TOX891-212-1-201-1-105/TOX3056-5-1.

PI 637641. *Oryza sativa* L.
Breeding. Pureline. Tox 3441-123-2-1-1-2-3; Q 39921. Developed in Nigeria.

PI 637642. *Oryza sativa* L.
Breeding. Pureline. Tox 3441-123-2-2-2-3-3; Q 39922. Developed in Nigeria.

PI 637643. *Oryza sativa* L.
Breeding. Pureline. Tox 3441-123-2-3-2-1-3-1-3; Q 39923. Developed in Nigeria.

PI 637644. *Oryza sativa* L.
Breeding. Pureline. Tox 3441-123-2-3-2-2-2; Q 39924. Developed in Nigeria.

PI 637645. *Oryza sativa* L.
Breeding. Pureline. Tox 3519-45-1-1-3; Q 39926. Developed in Nigeria.

PI 637646. Oryza sativa L.
Breeding. Pureline. Tox 3547-8-3-3-1-2-1-2; Q 39927. Developed in Nigeria.

PI 637647. Oryza sativa L.
Breeding. Pureline. Tox 3553-34-3-2-3-2-2; Q 39928. Developed in Nigeria. Pedigree - IR14632-2-3/IR35353-94-2-1-3.

PI 637648. Oryza sativa L.
Breeding. Pureline. Tox 3558-73-3-2-1-3-1; Q 39929. Developed in Nigeria.

PI 637649. Oryza sativa L.
Breeding. Pureline. Tox 3562-61-1-1-1-3-3; Q 39930. Developed in Nigeria. Pedigree - IR33353-64-1-2-1/TOX3219-36-1.

PI 637650. Oryza sativa L.
Breeding. Pureline. Tox 3562-61-2-2-3-1; Q 39932. Developed in Nigeria. Pedigree - IR33353-64-1-2-1/TOX3219-36-1.

PI 637651. Oryza sativa L.
Breeding. Pureline. Tox 3580-45-2-2-3; Q 39933. Developed in Nigeria. Pedigree - IR4829-89-2/TOX3027-43-1-1.

PI 637652. Oryza sativa L.
Breeding. Pureline. Tox 3580-47-103-2; Q 39934. Developed in Nigeria. Pedigree - IR4829-89-2/TOX3027-43-1-1.

PI 637653. Oryza sativa L.
Breeding. Pureline. Tox 3705-40-2-1-1; Q 39935. Developed in Nigeria.

PI 637654. Oryza sativa L.
Breeding. Pureline. Tox 3706-6-3-3-2; Q 39936. Developed in Nigeria.

PI 637655. Oryza sativa L.
Breeding. Pureline. Tox 3706-60-3-3-3; Q 39937. Developed in Nigeria.

PI 637656. Oryza sativa L.
Breeding. Pureline. Tox 3716-4-3-2-2-2-2; Q 39938. Developed in Nigeria.

PI 637657. Oryza sativa L.
Breeding. Pureline. Tox 3717-16-2-3-3; Q 39939. Developed in Nigeria. Pedigree - Faro 38/IR25912-30-2-3-2-3.

PI 637658. Oryza sativa L.
Breeding. Pureline. Tox 3717-18-2-2-1; Q 39940. Developed in Nigeria. Pedigree - Faro 38/Ir25912-30-2-3-2-3.

PI 637659. Oryza sativa L.
Breeding. Pureline. Tox 3717-25-2-1-1; Q 39941. Developed in Nigeria. Pedigree - Faro 38/IR25912-30-2-3-2-3.

PI 637660. Oryza sativa L.
Breeding. Pureline. Tox 3717-25-2-1-2; Q 39942. Developed in Nigeria. Pedigree - Faro 38/Ir25912-30-2-3-2-3.

PI 637661. Oryza sativa L.
Breeding. Pureline. Tox 3717-25-2-1-3; Q 39943. Developed in Nigeria. Pedigree - Faro 38/IR25912-30-2-3-2-3.

PI 637662. Oryza sativa L.
Breeding. Pureline. Tox 3717-25-3-1-3; Q 39944. Developed in Nigeria. Pedigree - Faro 38/IR25912-30-2-3-2-3.

PI 637663. Oryza sativa L.
Breeding. Pureline. Tox 3717-25-3-3-1; Q 39945. Developed in Nigeria. Pedigree - Faro 38/IR25912-30-2-3-2-3.

PI 637664. Oryza sativa L.
Breeding. Pureline. Tox 3717-25-3-3-2; Q 39946. Developed in Nigeria. Pedigree - Faro 38/IR25912-30-2-3-2-3.

PI 637665. Oryza sativa L.
Breeding. Pureline. Tox 3717-76-2-2-3; Q 39947. Developed in Nigeria. Pedigree - Faro 38/IR25912-30-2-3-2-3.

PI 637666. Oryza sativa L.
Breeding. Pureline. Tox 3717-81-1-1-3; Q 39948. Developed in Nigeria. Pedigree - Faro 38/IR25912-30-2-3-2-3.

PI 637667. Oryza sativa L.
Breeding. Pureline. Tox 3723-103-2-3-1; Q 39949. Developed in Nigeria.

PI 637668. Oryza sativa L.
Breeding. Pureline. Tox 3749-71-1-1-3-2-2; Q 39951. Developed in Nigeria. Pedigree - ITA308/IR29629-171-2-2-2.

PI 637669. Oryza sativa L.
Breeding. Pureline. Tox 3753-29-3-1-2-3-2-1; Q 39952. Developed in Nigeria.

PI 637670. Oryza sativa L.
Breeding. Pureline. Tox 3770-17-2-2-1; Q 39956. Developed in Nigeria.

PI 637671. Oryza sativa L.
Breeding. Pureline. Tox 3771-144-2-1-1; Q 39957. Developed in Nigeria.

PI 637672. Oryza sativa L.
Breeding. Pureline. Tox 3772-144-2-1-2; Q 39958. Developed in Nigeria.

PI 637673. Oryza sativa L.
Breeding. Pureline. Tox 3772-38-2-2-3; Q 39959. Developed in Nigeria.

PI 637674. Oryza sativa L.
Breeding. Pureline. Tox 3772-40-3-2-2; Q 39960. Developed in Nigeria.

PI 637675. Oryza sativa L.
Breeding. Pureline. Tox 3772-94-1-1-1; Q 39961. Developed in Nigeria.

PI 637676. Oryza sativa L.
Breeding. Pureline. Tox 3779-51-2-2-2; Q 39962. Developed in Nigeria.

PI 637677. Oryza sativa L.
Breeding. Pureline. Tox 3779-51-2-2-2; Q 39963. Developed in Nigeria.

PI 637678. Oryza sativa L.
Breeding. Pureline. Tox 3803-31-3-2-1-2-3; Q 39965. Developed in Nigeria.

PI 637679. Oryza sativa L.
Breeding. Pureline. Tox 3803-7-3-3-3-3-2; Q 39966. Developed in Nigeria.

PI 637680. Oryza sativa L.
Breeding. Pureline. Tox 3805-10-3-1-1-2-1; Q 39967. Developed in Nigeria. Pedigree - TOX960-42-1/IR22105-7-5-2.

PI 637681. Oryza sativa L.
Breeding. Pureline. Tox 3809-38-1; Q 39968. Developed in Nigeria. Pedigree - TOX960-42-1/RP1057-184-5-3-2.

PI 637682. Oryza sativa L.
Breeding. Pureline. Tox 3811-5-2-3-1-3-3-2; Q 39969. Developed in Nigeria.

PI 637683. Oryza sativa L.
Breeding. Pureline. Tox 3825-29-2-3-2-2-2; Q 39970. Developed in Nigeria. Pedigree - TOX1840-5-4-2-1-1/CIAT21528.

PI 637684. Oryza sativa L.
Breeding. Pureline. Tox 3851-3-3-3-3; Q 39971. Developed in Nigeria.

PI 637685. Oryza sativa L.
Breeding. Pureline. Tox 3857-34-3-3-1-3-2-1; Q 39973. Developed in Nigeria.

PI 637686. Oryza sativa L.
Breeding. Pureline. Tox 3867-19-1-1-3-1-1-1; Q 39974. Developed in Nigeria. Pedigree - TOX3118-78-2-1/ITA234.

PI 637687. Oryza sativa L.
Breeding. Pureline. Tox 3867-9-3-2-1-2-2-2; Q 39975. Developed in Nigeria. Pedigree - TOX3118-78-2-1/ITA234.

PI 637688. Oryza sativa L.
Breeding. Pureline. Tox 3872-61-3-3-3-2-1; Q 39977. Developed in Nigeria. Pedigree - TOX3118-78-2-1/B4259-48-1-1-3.

PI 637689. Oryza sativa L.
Breeding. Pureline. Tox 3872-67-2-3-2-2; Q 39978. Developed in Nigeria. Pedigree - TOX3118-78-2-1/B4259-48-1-1-3.

PI 637690. Oryza sativa L.
Breeding. Pureline. Tox 3876-53-1-1; Q 39979. Developed in Nigeria.

PI 637691. Oryza sativa L.
Breeding. Pureline. Tox 3876-56-1-4; Q 39980. Developed in Nigeria.

PI 637692. Oryza sativa L.
Breeding. Pureline. Tox 3876-58-1-3; Q 39982. Developed in Nigeria.

PI 637693. *Oryza sativa* L.
Breeding. Pureline. Tox 3880-5-1-1-3; Q 39983. Developed in Nigeria. Pedigree - TOX3118-78-2-1/TOX1840-5-4-2-1.

PI 637694. *Oryza sativa* L.
Breeding. Pureline. Tox 3894-33-2-3-3-1-3-2; Q 39984. Developed in Nigeria. Pedigree - TOX85C-C1-16-WAS1/IR64.

PI 637695. *Oryza sativa* L.
Breeding. Pureline. Tox 3894-41-2-1-3; Q 39985. Developed in Nigeria. Pedigree - TOX85C-C1-16-WAS1/IR64.

PI 637696. *Oryza sativa* L.
Breeding. Pureline. Tox 3894-41-2-3-1; Q 39986. Developed in Nigeria. Pedigree - TOX85C-C1-1-WAS1/IR64.

PI 637697. *Oryza sativa* L.
Breeding. Pureline. Tox 3913-1-1-1-1-3-3; Q 39987. Developed in Nigeria. Pedigree - IR4819-77-3-2/ITA312.

PI 637698. *Oryza sativa* L.
Breeding. Pureline. Tox 3931-27-3-3-3-1; Q 39989. Developed in Nigeria. Pedigree - IR13146-45-2-3//ITA212/Ex Kano.

PI 637699. *Oryza sativa* L.
Breeding. Pureline. Tox 3931-9-2-3-1-3-2; Q 39990. Developed in Nigeria. Pedigree - IR13146-45-2-3//ITA212/Ex Kano.

PI 637700. *Oryza sativa* L.
Breeding. Pureline. Tox 3931-9-3-3-2-1-1; Q 39991. Developed in Nigeria. Pedigree - IR13146-45-2-3//ITA212/Ex Kano.

PI 637701. *Oryza sativa* L.
Breeding. Pureline. Tox 3967-17-1-3; Q 39992. Developed in Nigeria.

PI 637702. *Oryza sativa* L.
Breeding. Pureline. Tox 3986-6-1-1-2-1-3-3; Q 39993. Developed in Nigeria.

PI 637703. *Oryza sativa* L.
Breeding. Pureline. Tox 4008-40-3-2-3-2-3-2; Q 39994. Developed in Nigeria. Pedigree - Bouake 189/ITA308.

PI 637704. *Oryza sativa* L.
Breeding. Pureline. Tox 4009-8-1-3-1-2-2-1; Q 39995. Developed in Nigeria.

PI 637705. *Oryza sativa* L.
Breeding. Pureline. Tox 4009-8-1-3-1-2-2-3; Q 39996. Developed in Nigeria.

PI 637706. *Oryza sativa* L.
Breeding. Pureline. Tox 4093-12-3; Q 39997. Developed in Nigeria.

PI 637707. *Oryza sativa* L.
Breeding. Pureline. Tox 4136-38-2; Q 39998. Developed in Nigeria.

PI 637708. Oryza sativa L.
Breeding. Pureline. Tox 4136-41-3; Q 39999. Developed in Nigeria.

PI 637709. Oryza sativa L.
Breeding. Pureline. Tox 4248-74-1; Q 40001. Developed in Nigeria.

PI 637710. Oryza sativa L.
Breeding. Pureline. Tox 4248-9-1; Q 40002. Developed in Nigeria.

PI 637711. Oryza sativa L.
Breeding. Pureline. Tox 4251-102-3; Q 40003. Developed in Nigeria.

PI 637712. Oryza sativa L.
Breeding. Pureline. Tox 4251-117-2; Q 40004. Developed in Nigeria.

PI 637713. Oryza sativa L.
Breeding. Pureline. Tox 4251-130-2; Q 40005. Developed in Nigeria.

PI 637714. Oryza sativa L.
Breeding. Pureline. Tox 4251-18-2; Q 40006. Developed in Nigeria.

PI 637715. Oryza sativa L.
Breeding. Pureline. Tox 4251-264-2; Q 40007. Developed in Nigeria.

PI 637716. Oryza sativa L.
Breeding. Pureline. Tox 4251-270-2; Q 40008. Developed in Nigeria.

PI 637717. Oryza sativa L.
Breeding. Pureline. Tox 4251-271-2; Q 40009. Developed in Nigeria.

PI 637718. Oryza sativa L.
Breeding. Pureline. Tox 4251-313-3; Q 40010. Developed in Nigeria.

PI 637719. Oryza sativa L.
Breeding. Pureline. Tox 4251-385-2; Q 40011. Developed in Nigeria.

PI 637720. Oryza sativa L.
Breeding. Pureline. Tox 4251-389-1; Q 40012. Developed in Nigeria.

PI 637721. Oryza sativa L.
Breeding. Pureline. Tox 4251-397-2; Q 40013. Developed in Nigeria.

PI 637722. Oryza sativa L.
Breeding. Pureline. Tox 4251-413-2; Q 40014. Developed in Nigeria.

PI 637723. Oryza sativa L.
Breeding. Pureline. Tox 4251-481-1; Q 40015. Developed in Nigeria.

PI 637724. Oryza sativa L.
Breeding. Pureline. Tox 4251-449-3; Q 40016. Developed in Nigeria.

PI 637725. Oryza sativa L.
Breeding. Pureline. Tox 4251-473-1; Q 40018. Developed in Nigeria.

PI 637726. Oryza sativa L.
Breeding. Pureline. Tox 4251-484-1; Q 40019. Developed in Nigeria.

PI 637727. Oryza sativa L.
Breeding. Pureline. Tox 4251-493-1; Q 40020. Developed in Nigeria.

PI 637728. Oryza sativa L.
Breeding. Pureline. Tox 4251-506-2; Q 40021. Developed in Nigeria.

PI 637729. Oryza sativa L.
Breeding. Pureline. Tox 4251-510-2; Q 40022. Developed in Nigeria.

PI 637730. Oryza sativa L.
Breeding. Pureline. Tox 4251-550-1; Q 40023. Developed in Nigeria.

PI 637731. Oryza sativa L.
Breeding. Pureline. Tox 4251-623-3; Q 40024. Developed in Nigeria.

PI 637732. Oryza sativa L.
Breeding. Pureline. Tox 4251-635-3; Q 40025. Developed in Nigeria.

PI 637733. Oryza sativa L.
Breeding. Pureline. Tox 4251-63-2; Q 40026. Developed in Nigeria.

PI 637734. Oryza sativa L.
Breeding. Pureline. Tox 4251-641-1; Q 40027. Developed in Nigeria.

PI 637735. Oryza sativa L.
Breeding. Pureline. Tox 4251-82-2; Q 40028. Developed in Nigeria.

PI 637736. Oryza sativa L.
Breeding. Pureline. Tox 4251-92-1; Q 40029. Developed in Nigeria.

PI 637737. Oryza sativa L.
Breeding. Pureline. Tox 4251-99-1; Q 40030. Developed in Nigeria.

PI 637738. Oryza sativa L.
Breeding. Pureline. Tox 728-1; Q 40031. Developed in Nigeria. Pedigree - Mahsuri/RPCB-2B-849.

PI 637739. Oryza sativa L.
Breeding. Pureline. Tox 85a-c2-455-2; Q 40032. Developed in Nigeria.

PI 637740. Oryza sativa L.
Breeding. Pureline. Tox 894-28-201-1-2; Q 40033. Developed in Nigeria. Pedigree - IR43//BPI76*9/Dawn.

PI 637741. Oryza sativa L.
Breeding. Pureline. UPR 254-85-tc-a3; Q 40034. Developed in India. Pedigree - Jaya/TKM6.

The following were donated by Jerry R. Tjoe-Awie, Anne van Dijk Rice Researh Centre Nickerie (ADRON), P.O. Box 4339, Nieuw Nickerie, Suriname. Received 09/13/1999.

PI 637742. Oryza sativa L.
Cultivated. Pureline. "Ahonyo"; Q 40525.

PI 637743. Oryza sativa L.
Cultivated. Pureline. "Aleisi Sei"; Q 40526.

PI 637744. Oryza sativa L.
Cultivated. Pureline. "Amesina"; Q 40527.

PI 637745. Oryza sativa L.
Cultivated. Pureline. "Baaka Tapu"; Q 40528.

PI 637746. Oryza sativa L.
Cultivated. Pureline. "Bakapao Yinge Yinge"; Q 40529.

PI 637747. Oryza sativa L.
Cultivated. Pureline. "Be Aleisi Padasi"; Q 40530.

PI 637748. Oryza sativa L.
Cultivated. Pureline. "Be Aleisi Sei"; Q 40531.

PI 637749. Oryza sativa L.
Cultivated. Pureline. "Be Sikasi"; Q 40532.

PI 637750. Oryza sativa L.
Cultivated. Pureline. "Boto Pasi 1"; Q 40533.

PI 637751. Oryza sativa L.
Cultivated. Pureline. "Boto Pasi 2"; Q 40534.

PI 637752. Oryza sativa L.
Cultivated. Pureline. "Boto Pasi 3"; Q 40535.

PI 637753. Oryza sativa L.
Cultivated. Pureline. "Gogowiri"; Q 40536.

PI 637754. Oryza sativa L.
Cultivated. Pureline. "Gran Aleisi"; Q 40537.

PI 637755. Oryza sativa L.
Cultivated. Pureline. "Landbouw"; Q 40538.

PI 637756. Oryza sativa L.
Cultivated. Pureline. "Marshall Kreek 1"; Q 40539.

PI 637757. Oryza sativa L.
Cultivated. Pureline. "Mboto Molia"; Q 40540.

PI 637758. Oryza sativa L.
Cultivated. Pureline. "Pedrosungu 1"; Q 40541.

PI 637759. Oryza sativa L.
Cultivated. Pureline. "Pedrosungu 2"; Q 40542.

PI 637760. Oryza sativa L.
Cultivated. Pureline. "Pedrosungu 3"; Q 40543.

PI 637761. Oryza sativa L.
Cultivated. Pureline. "Pinde Gogowiri"; Q 40544.

PI 637762. Oryza sativa L.
Cultivated. Pureline. "Redi Anaisa"; Q 40545.

PI 637763. Oryza sativa L.
Cultivated. Pureline. "Volo"; Q 40546.

PI 637764. Oryza sativa L.
Cultivated. Pureline. "Weti Ayoyo"; Q 40547.

PI 637765. Oryza sativa L.
Cultivated. Pureline. "Yinge Yinge"; Q 40548.

The following were donated by William Bonsal, Scatterseed Project, Box 1167, Baley Road, Farmington, Maine 04938, United States. Received 05/26/2000.

PI 637766. Oryza sativa L.
Cultivated. Pureline. Q 42655.

The following were donated by Randy Ireson, American Friends Service Committee, 3590 Elderberry Dr. South, Salem, Oregon 97302, United States. Received 06/13/2000.

PI 637767. Oryza sativa L.
Cultivar. Pureline. "YOM JU NO. 1"; Q 42657.

PI 637768. Oryza sativa L.
Cultivar. Pureline. "YOM JU NO. 14"; Q 42658.

PI 637769. Oryza sativa L.
Cultivar. Pureline. "P'YONG BUK NO. 3"; Q 42659.

PI 637770. Oryza sativa L.
Cultivar. Pureline. "P'YONG YANG NO. 8"; Q 42660.

PI 637771. Oryza sativa L.
Cultivar. Pureline. "RYONG SONG NO. 6"; Q 42661.

PI 637772. Oryza sativa L.
Cultivar. Pureline. "RYONG SONG NO. 14"; Q 42662.

PI 637773. Oryza sativa L.
Cultivar. Pureline. "RYONG SONG NO. 15"; Q 42663.

PI 637774. Oryza sativa L.
Cultivar. Pureline. "RYONG SONG NO. 25"; Q 42664.

PI 637775. Oryza sativa L.
Cultivar. Pureline. "MI RIM NO. 67"; Q 42665.

PI 637776. Oryza sativa L.
Cultivar. Pureline. "YON AN NO. 12"; Q 42666.

PI 637777. Oryza sativa L.
Cultivar. Pureline. "SI JUNG NO. 10"; Q 42667.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 08/03/1998.

PI 637778. Oryza sativa L.
Breeding. Pureline. WC 380; IRGA 284-18-2-2-2; Q 43781. Developed in Brazil. Pedigree - IRGA178/BR IRGA409.

The following were developed by Craig F. Morris, USDA-ARS, Western Wheat Quality Lab., E-202 FSHN Facility East, Pullman, Washington 99164-6394, United States; Garrison King, USDA-ARS Western Wheat Quality Lab, E 202 Food Quality Bldg., P.O. Box 646394, Pullman, Washington 99164-6394, United States. Received 02/11/2005.

PI 637779. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "WAXY-PEN"; WQL7PENWX-2; WA7996; NSGC 9501. PVP 200600005; CV-1006. Pedigree - WQL6K107-BHWX2-2a (PI612545)/6*Penawawa. Released 2006. Penawawa-X was released due to its unique starch composition and end-use quality, and its potential for broad adaptation to U.S. Pacific Northwest environments. Penawawa-X is a fully-waxy (< 1% amylose), back-cross-five derivative of the soft whitpring wheat variety `Penawawa'. Penawawa (PI 495916; `Potam 70' / `Fielder') was developed by Dr. Calvin Konzak while at the Washington State University, Pullman, WA, and was released in 1985. Penawawa is null for the granule-bound starch synthase (GBSS)(Waxy) gene on chromosome 4A (genotype = Wx-A1a, Wx-B1b, Wx-D1a). The donor of the two additional GBSS null alleles (Wx-A1b, Wx-D1b) was the soft red spring wheat germ plasm line `WQL6K107-BHWX 2-2a' (PI 612545), which has the pedigree: `K anto 107' / `Bai Huo' (Kanto 107 is PI 631445, Bai Huo is PI 606717). Breeder seed of Penawawa-X was derived by bulking seed from 27 BC5F3-derived F5 field plots grown near Bozeman, Montana in 2004. The BC5F3 plants were derived from 10 randomly-selected BC5F2 spikes which had been assayed for homozygous waxy trait using I2/KI (stock solution of 0.1 M of each; working dilution in the range of 5-10 mM) on several kernels each. The kernels had a small portion of the distal brush end removed with a razor blade and the exposed endosperm was stained with iodine. Rust-colored, as opposed to dark purple color, was indicative of waxy starch. Waxy trait was confirmed on the BC5F5 seed.

The following were collected by Philip L. Forsline, USDA, ARS, Cornell University, Plant Genetic Resources Unit, Geneva, New York 14456-0462, United States. Received 09/19/1996.

PI 637780. Malus sieversii (Ledeb.) M. Roem.
Wild. KAZ 96 08-17; GMAL 4053.a. Collected 09/14/1996 in Kazakhstan. Latitude 42° 39' 45" N. Longitude 70° 15' 13" E. Elevation 930 m. Kok Bulak (Black Spring) Forestry Camp. 35 km southeast of Boraldy Camp visited in 1995. Collections made in and around camp-north, east, south of camp. Variable and open, stream bed and hillsides. Rainfall 275mm. Dominant tree sp: Crataegus; Assoc.-Malus, Vitis, Morus Rhamnus. Dominant shrub sp: Amygdalus, Pyrus, Rosa. Dominant herbaceous: Grasses. Sampled 40 fruits from 1 tree. Flesh flavor is aromatic and sweet. Fruit size is larger than 50mm. Free of disease. Heavy codling moth, nice apple. Scion also collected.

The following were donated by Bob Guthrie, 1810 Alameda Street, Roseville, Minnesota 55113, United States. Received 12/09/1999.

PI 637781. Actinidia arguta var. purpurea (Rehder) C. F. Liang
Wild. A. arguta var. purpurea; CACT 124; NA 13399; DACT 45. Pedigree - Selection of A. arguta var. purpurea.

PI 637782. Actinidia kolomikta (Maxim. & Rupr.) Maxim.
Cultivar. Northwoods BG; Northwoods; CACT 130. Pedigree - Pollinizer selection of A. arguta.

The following were donated by Roger Meyer, 16531 Mt. Shelly Circle, Fountain Valley, California 92708, United States; Roger Meyer, 16531 Mt. Shelly Circle, Fountain Valley, California 92708, United States. Received 03/20/2000.

PI 637783. Actinidia latifolia (Gardner & Champ.) Merr.
Cultivated. CACT 131; A. latifolia.

The following were donated by Roger Meyer, 16531 Mt. Shelly Circle, Fountain Valley, California 92708, United States. Received 03/20/2000.

PI 637784. Actinidia macrosperma C. F. Liang
Cultivated. CACT 132; A. macrosperma.

PI 637785. Actinidia macrosperma C. F. Liang
Cultivated. CACT 133; A. macrosperma.

PI 637786. Actinidia valvata Dunn
Cultivated. CACT 134; A. valvata.

PI 637787. Actinidia melanandra Franch.
Cultivated. CACT 135; A. melanandra.

PI 637788. Actinidia arguta var. purpurea (Rehder) C. F. Liang
Cultivated. CACT 136; A. arguta var. purpurea. Pedigree - Selection of A. arguta var. purpurea.

PI 637789. Actinidia polygama (Siebold & Zucc.) Maxim.
Uncertain. CACT 140; A. polygama (female).

PI 637790. Actinidia polygama (Siebold & Zucc.) Maxim.
Uncertain. CACT 141; A. polygama (male).

PI 637791. Actinidia rufa (Siebold & Zucc.) Planch. ex Miq.
Uncertain. A. rufa (female); CACT 142; A. rufa female.

The following were donated by Roger Meyer, 16531 Mt. Shelly Circle, Fountain Valley, California 92708, United States; Roger Meyer, 16531 Mt. Shelly Circle, Fountain Valley, California 92708, United States. Received 03/09/2001.

PI 637792. Actinidia hemsleyana Dunn
Cultivated. CACT 146; A. hemsleyana (female). Pedigree - Female selection of A. hemsleyana.

The following were donated by Roger Meyer, 16531 Mt. Shelly Circle, Fountain Valley, California 92708, United States. Received 03/09/2001.

PI 637793. Actinidia arguta var. purpurea (Rehder) C. F. Liang
Cultivated. CACT 147; A. arguta var. purpurea (female). Pedigree - Female selection of A. arguta var. purpurea.

PI 637794. Actinidia rufa (Siebold & Zucc.) Planch. ex Miq.
Cultivated. CACT 151; A. rufa (male).

PI 637795. Actinidia setosa (H. L. Li) C. F. Liang & A. R. Ferguson
Cultivated. CACT 152; A. setosa.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Nick Vorsa, Rutgers University, Blueberry & Cranberry, Research Station, Chatsworth, New Jersey 08109, United States; Pavel Cherbukin, Vavilov Research Institute, Far Eastern Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation; Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 08/31/2001.

PI 637796. Actinidia kolomikta (Maxim. & Rupr.) Maxim.
Wild. HVSC-010; CACT 156; A. kolomikta HVSC-010. Collected 08/10/2001 in Primorye, Russian Federation. Latitude 44° 22' 34" N. Longitude 134° 39' 10" E. Elevation 377 m. Dubovaya (Oak) mountain, near Smolyanka Creek and 8 km east of Shumny. Dense woods with Betula sp., Salix sp. and Ragweed. 50% light exposure. Pedigree - Collected from the wild in Primorye, Russian Federation.

PI 637797. Actinidia kolomikta (Maxim. & Rupr.) Maxim.
Wild. HVSC-016; CACT 157; A. kolomikta HVSC-016. Collected 08/10/2001 in Primorye, Russian Federation. Latitude 44° 29' 41" N. Longitude 135° 23' 12" E. Elevation 673 m. Vysokogorsky Pass, 14 km southwest of Dalnegorsk. Gravel and sand, well drained. Pedigree - Collected from the wild in Primorye, Russian Federation.

PI 637798. Actinidia kolomikta (Maxim. & Rupr.) Maxim.
Wild. HVSC-027; CACT 158; A. kolomikta HVSC-027. Collected 08/11/2001 in Primorye, Russian Federation. Latitude 44° 41' 9" N. Longitude 135° 35' 31" E. Elevation 794 m. 14 km northeast of Dalnegorsk. Vicinity of camp eleven. Dense woods of White Birch forest, Larches, Spruce and Populus. Humus on clay. 40 to 50% light exposure. Pedigree - Collected from the wild in Primorye, Russian Federation.

PI 637799. Actinidia kolomikta (Maxim. & Rupr.) Maxim.
Wild. HVSC-037; CACT 159; A. kolomikta HVSC-037. Collected 08/12/2001 in Primorye, Russian Federation. Latitude 44° 50' N. Longitude 135° 41' E. Elevation 549 m. Riparian zone of Mark 6 River, 70 km SE of Mel'nichnoye. Mostly flat northeast aspect with Tilia, Populus, Betula, Sambucus, Prunus, Aster, Jewelweed, Labrador Tea, Large-leaf Plantain and Stinging Nettles. Pedigree - Collected from the wild in Primorye, Russian Federation. Vigorous plant having good sized leaves

with many holes caused by Japanese Beetles. This Actinidia is used locally to make wine. In this area hip length boots are good protection against vipers, a brown snake with yellow stripes, living amongst the r ocks by the river.

PI 637800. Actinidia kolomikta (Maxim. & Rupr.) Maxim.
Wild. HVSC-072; CACT 160; A. kolomikta HVSC-072. Collected 08/16/2001 in Khabarovsk, Russian Federation. Latitude 49° 23' 32" N. Longitude 137° 40' 39" E. Elevation 364 m. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

The following were collected by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 12/07/2001.

PI 637801. Actinidia arguta (Siebold & Zucc.) Planch. ex Miq.
Wild. HVSC-114; CACT 150; A. arguta HVSC-114. Collected 08/2001 in Primorye, Russian Federation. Latitude 42° 34' 34" N. Longitude 131° 12' 20" E. Gamov Cape, Khasan district. Pedigree - Collected from the wild in Primorye, Russian Federation.

The following were donated by Charles J. Simon, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616-8607, United States. Received 11/30/2001.

PI 637802. Actinidia arguta (Siebold & Zucc.) Planch. ex Miq.
Cultivated. "Opitz male"; CACT 162.

PI 637803. Actinidia arguta (Siebold & Zucc.) Planch. ex Miq.
Cultivated. "Opitz"; CACT 163. Pedigree - Selection of A arguta.

PI 637804. Actinidia arguta (Siebold & Zucc.) Planch. ex Miq.
Cultivated. #74 female; CACT 164; A. arguta #74 female.

PI 637805. Actinidia arguta (Siebold & Zucc.) Planch. ex Miq.
Cultivated. 40537-C #40 female; CACT 165; A. arguta 40537-C #40 female.

PI 637806. Actinidia arguta (Siebold & Zucc.) Planch. ex Miq.
Cultivated. Leningradskaya pozdnaya #286 female; CACT 166; Unknown arguta female.

PI 637807. Actinidia melanandra Franch.
Cultivated. CACT 168; A. melandra 1064-79 #202 M/F.

PI 637808. Actinidia hybrid
Cultivated. CACT 169; A. arguta #211.

PI 637809. Actinidia hybrid
Cultivated. CACT 170; A. arguta #211.

PI 637810. Actinidia arguta (Siebold & Zucc.) Planch. ex Miq.
Cultivated. CACT 171; A. arguta NA 7 #231. Pedigree - Selection of wild collected A. arguta.

PI 637811. Actinidia arguta (Siebold & Zucc.) Planch. ex Miq. Cultivated. CACT 172; A. arguta 74-49F #240 female.

PI 637812. Actinidia arguta (Siebold & Zucc.) Planch. ex Miq. Cultivated. CACT 174; A. arguta 125-40 #222 female.

PI 637813. Actinidia arguta (Siebold & Zucc.) Planch. ex Miq. Cultivated. CACT 175; A. arguta 119-40-B #216 male.

PI 637814. Actinidia arguta (Siebold & Zucc.) Planch. ex Miq. Cultivar. "Langer"; CACT 176. Pedigree - Female selection of A. arguta; selected in Oregon.

PI 637815. Actinidia arguta (Siebold & Zucc.) Planch. ex Miq. Cultivated. CACT 177; A. arguta 40537-C National Arboretum #24.

PI 637816. Actinidia arguta (Siebold & Zucc.) Planch. ex Miq. Cultivated. CACT 178; A. arguta 753-C USPIS M.D. #247.

PI 637817. Actinidia arguta (Siebold & Zucc.) Planch. ex Miq. Cultivated. CACT 179; Woodenville #249 female.

The following were collected by Pavel Cherbukin, Vavilov Research Institute, Far Eastern Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation; Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation; Luda Popova, Vavilov Research Institute, Far Eastern Experiment Station, Vavilov Road, House #9, Vladivostok, Primorye 690025, Russian Federation. Donated by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 01/29/2004.

PI 637818. Actinidia kolomikta (Maxim. & Rupr.) Maxim. Wild. AS-03-001; A. kolomikta AS-03-001; CACT 192. Collected 09/07/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhlin, Russian Federation.

PI 637819. Actinidia kolomikta (Maxim. & Rupr.) Maxim. Wild. AS-03-002; A. kolomikta AS-03-002; CACT 193. Collected 09/06/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhlin, Russian Federation.

PI 637820. Actinidia kolomikta (Maxim. & Rupr.) Maxim. Wild. AS-03-003; A. kolomikta AS-03-003; CACT 194. Collected 09/06/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhlin, Russian Federation.

PI 637821. Actinidia kolomikta (Maxim. & Rupr.) Maxim. Wild. AS-03-004; A. kolomikta AS-03-004; CACT 195. Collected 09/06/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhlin, Russian Federation.

PI 637822. Actinidia kolomikta (Maxim. & Rupr.) Maxim. Wild. AS-03-005; A. kolomikta AS-03-005; CACT 196. Collected 09/06/2003

in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhlin, Russian Federation.

PI 637823. Actinidia kolomikta (Maxim. & Rupr.) Maxim. Wild. AS-03-006; A. kolomikta AS-03-006; CACT 197. Collected 09/05/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhlin, Russian Federation.

PI 637824. Actinidia kolomikta (Maxim. & Rupr.) Maxim. Wild. AS-03-007; A. kolomikta AS-03-007; CACT 198. Collected 09/05/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhlin, Russian Federation.

PI 637825. Actinidia kolomikta (Maxim. & Rupr.) Maxim. Wild. AS-03-008; A. kolomikta AS-03-008; CACT 199. Collected 09/04/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhlin, Russian Federation.

PI 637826. Actinidia kolomikta (Maxim. & Rupr.) Maxim. Wild. AS-03-009; A. kolomikta AS-03-009; CACT 200. Collected 09/04/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhlin, Russian Federation.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan; Takao Sato, Hokkaido Forestry Research Institute, General Research and Information Center, Koshunai, Bibai, Hokkaido 0079-0918, Japan. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 637827. Actinidia kolomikta (Maxim. & Rupr.) Maxim. Wild. J09; HD-2004-09; CACT 201; A. kolomikta J09. Collected 07/09/2004 in Hokkaido, Japan. Latitude 43° 17' 24" N. Longitude 141° 51' 15" E. Elevation 33 m. In Bibai, at the Hokkaido Forestry Research Institute. Seed of this accession was collected from cultivated plants at the HFRI in Bibai, Hokkaido, Japan. Pedigree - Collected from the wild in Hokkaido, Japan. Hokkaido Forestry Research Institute and Greenery Research and Information Center is a state run facility by the Prefecture of Hokkaido. Native woody plants of Hokkaido are studied at this center. Dr. Takao Sato is a senior research scientist at this center and has written a book on 'Trees and Shrubs of Hokkaido'. Dr. Sato guided us through the collections at the HFRI. This accession was collected from cultivated plants of originally wild collected species growing in the experimental gardens. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultura Service, USA, prepared in May 2004.

The following were collected by Scott Dorsch, Busch Agricultural Resources Inc., 3515 East County Road 52, Fort Collins, Colorado 80524, United States; John Waddell, USDA, ARS, National Center for, Genetic Resources Preservation, Fort Collins, Colorado 80521-4500, United States; Douglas Cook, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Richard O. Hampton, 2170 Bonnie Dr., Payette, Idaho 83661, United States. Donated by Richard O. Hampton, 2170 Bonnie Dr., Payette, Idaho 83661, United States. Received 08/07/2002.

PI 637828. Humulus lupulus var. lupuloides E. Small
Wild. Souris E2 #1; CHUM 1153. Collected in Manitoba, Canada. Latitude 49° 36' N. Longitude 100° 14' W. Elevation 0 m. Along Souris River. Collected 10/13/2001 in Manitoba, Canada. Latitude 49° 36' N. Longitude 100° 14' W. Elevation 0 m. Along Souris River. Pedigree - Collected from the wild in Manitoba, Canada.

PI 637829. Humulus lupulus var. lupuloides E. Small
Wild. Souris E2 #5; CHUM 1157. Collected in Manitoba, Canada. Latitude 49° 36' N. Longitude 100° 14' W. Elevation 0 m. Along Souris River. Collected 10/13/2001 in Manitoba, Canada. Latitude 49° 36' N. Longitude 100° 14' W. Elevation 0 m. Along Souris River. Pedigree - Collected from the wild in Manitoba, Canada.

The following were collected by Douglas Cook, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Jodi Smith-Jackson, USDA, ARS, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Donated by James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/10/2002.

PI 637830. Humulus lupulus var. neomexicanus A. Nelson & Cockerell
Wild. Eldorado Canyon S.P.; OCJ-4; CHUM 1336. Collected 09/10/2002 in Colorado, United States. Latitude 39° 55' 49" N. Longitude 105° 17' 48" W. Elevation 1890 m. South foulder on State Highway 93 (S-93) then southwest on S-170 to Eldorado Canyon State Park. Populus sp., Salix sp. and Symphoricarpus sp. Pedigree - Collected from the wild in Colorado.

PI 637831. Humulus lupulus var. neomexicanus A. Nelson & Cockerell
Wild. Pecos #1; OCJ-56; CHUM 1383. Collected 09/19/2002 in New Mexico, United States. Latitude 35° 43' N. Longitude 105° 40' 48" W. Elevation 2149 m. North of Pecos, along State Highway 63 opposite the drive into Tre Legunas. With Abies concolor, Pinus pondorosa and Salix sp. Pedigree - Collected from the wild in New Mexico.

The following were collected by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/05/1998.

PI 637832. Mentha x villosa Huds.
Wild. CMEN 696. Collected 08/03/1998 in Oregon, United States. Latitude 44° 10' N. Longitude 122° 10' W. Elevation 320 m. Borders of parking lot at the Log Cabin Restaurant on Highway 126 in McKenzie Bridge, Lane

county, Oregon. Weedy margin of gravel parking lot. Pedigree - Wild but not native.

The following were donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 06/10/2002.

PI 637833. Mentha spicata L.
Cultivar. "Kentucky Colonel"; CMEN 698. Kentucky Colonel (Mentha spicata) Large, dark green, slightly crinkly leaves. Our all-around favorite for Mint Juleps or iced tea. Kentucky Colonel is a reliably hardy, strongly flavored spearmint that is favored by many Low country growers. From http://www.petesherbs.com/Mint.htm (ca. 2003) - Regarding mints in the caribbean: 'I have not found this in the Caribbean. What I have found is the spearmint-scented, rugose leaved form of M. spicata L. This passes in the commerial herb trade as M. cordifolia (misapplied name) or Kentucky Colonel. It is present wherever the Conquistadores had influence, from the Caribbean to Lake Atitlon, Guatemala to New Mexico to the Philippines. The mojito is the Cuban version of the American mint julep (or vice versa),...this mint, and is the very same one that is... used in the mint julep in the South.' - email comments by A. Tucker, 21 March, 2003.

The following were donated by Myra Manoah, Ministry of Agriculture, The Volcani Center, The Israeli Gene Bank for Agricultural Crops, Bet Dagan, Central 50250, Israel. Received 04/08/2003.

PI 637834. Mentha longifolia (L.) Huds.
Wild. CMEN 699. Collected in Israel. Elevation 0 m. En Vardinon, southeast of Shamir. Hula and Dan Valley. Pedigree - Collected from the wild in Israel.

PI 637835. Mentha longifolia (L.) Huds.
Wild. CMEN 700. Collected in Israel. Elevation 0 m. Spring area southwest of entrance to Zefat. Upper Galilee. Pedigree - Collected from the wild in Israel.

The following were collected by Rocky Lundy, Mint Industry Research Council, P.O. Box 502, Stevenson, Washington 98648, United States; Ruth Moysen, Quest International Fragrances Company, 400 International Drive, P.O. Box 901, Mt. Olive, New Jersey 07828, United States. Donated by Rocky Lundy, Mint Industry Research Council, P.O. Box 502, Stevenson, Washington 98648, United States. Received 08/05/2003.

PI 637836. Mentha canadensis L.
Wild. CMEN 701. Collected 09/2003 in Montana, United States. Latitude 47° 8' 3" N. Longitude 110° 56' 30" W. Elevation 1375 m. Southeast of Great Falls. Off U.S. 89 onto Logging Creek Road 3.5 miles north of Monarch. Go west to Logging Creek. Pedigree - Collected from the wild in Montana.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/03/2003.

PI 637837. Mentha canadensis L.
Wild. Umpqua Mint; CMEN 702. Collected 08/24/2003 in Oregon, United States. Latitude 43° 13' 50" N. Longitude 123° 21' 21" W. Elevation 165 m. 1200 NW Stewart Parkway, Roseburg, Oregon. Growing in open field in direct full sun, dought conditions. Pedigree - Collected from the wild in Oregon.

The following were collected by Paul Meyer, The University of Pennsylvania, Morris Arboretum, 9414 Meadowlark Avenue, Philadelphia, Pennsylvania 19118, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Alan Whittemore, U.S. National Arboretum, USDA, ARS, 3501 New York Avenue, NE, Washington, District of Columbia 20002-1958, United States; Ashot A. Charchoglian, National Academie of Sciences, Institute of Botany, Yerevan, Armenia. Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/15/2003.

PI 637838. Mentha longifolia (L.) Huds.
Wild. ARM-02-113; CMEN 703. Collected 09/07/2002 in Armenia. Latitude 40° 39' 38" N. Longitude 45° 0' 20" E. Elevation 1669 m. Dilijan National Park, Tavush Marz (province). Pedigree - Collected from the wild in Armenia.

The following were donated by Papa Geno's Herb Farm and Pairie Perennials Ltd., 5835 West Roca Road, Martell, Nebraska 68404, United States. Received 10/23/2003.

PI 637839. Mentha x piperita L.
Cultivar. "Blue Balsam"; 9247; CMEN 704.

The following were donated by Companion Plants, 7247 N. Coolville Ridge Road, Athens, Ohio 45701, United States. Received 10/23/2003.

PI 637840. Mentha x rotundifolia (L.) Huds.
Uncertain. Egyptian Mint; MEN110; CMEN 705.

PI 637841. Mentha spicata L.
Uncertain. Variegata; MEN270; CMEN 706.

PI 637842. Mentha asiatica Boriss.
Uncertain. MEN55; CMEN 707. Pedigree - Wild plant from a cultivate source, donated from Companion Plants, Athens, Ohio.

PI 637843. Mentha haplocalyx Briq.
Uncertain. Haplocalyx Mint; MEN80; CMEN 708.

The following were developed by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kelly Vining, University of New Hampshire, Plant Biology Dept., Rudman Hall 1st Floor, Durham, New Hampshire 03824, United States. Donated by Kelly Vining, University of New Hampshire,

Plant Biology Dept., Rudman Hall 1st Floor, Durham, New Hampshire 03824, United States. Received 05/19/2004.

PI 637844. Mentha hybrid
Cultivar. CMEN 709; Vining. Pedigree - Black Mitcham x MEN81.001 (PI 557759). This plant has a strong peppermint odor and large oil glands. It is self-fertile and has produced some interesting offspring. The cross was made in the summer of 1999 at the University of New Hampshire, Durham, New Hampshire.

The following were developed by Darrell M. Wesenberg, USDA, ARS, National Small Grains Germplasm, Research Facility, Aberdeen, Idaho 83210, United States; Charles A. Erickson, USDA, ARS, National Small Grains Collection, 1691 S 2700 W, Aberdeen, Idaho 83210, United States; Berne L. Jones, USDA, ARS, Cereal Crops Research Unit, 501 North Walnut Street, Madison, Wisconsin 53705-2334, United States; Don Obert, USDA-ARS, 1691 S. 2700 W., Aberdeen, Idaho 83210, United States; D.E. Durrup, USDA-ARS, Small Grains and Potato Research Facility, Aberdeen, Idaho 83210, United States. Received 02/17/2005.

PI 637845. Hordeum vulgare L. **subsp. vulgare**
Cultivar. Pureline. "CHARLES"; 94Ab1274; NSGC 9502. CV-321. Pedigree - Bearpaw/81Ab1702 ; 81AB1702 is a selection from a bulk of 3 crosses: Malta/74Ab10082; Malta//Moravian III/72Ab348294; and 4170/12222//Moravian III/72Ab3482. Released 2005. Charles is a winter 2-row malting barley with rough awns and a moderately lax spike. The kernel has short rachilla hairs, a wrinkled hull with prominent veins, and white aleurone. Charles head 3 days later than '88Ab536-B' and 1 day later than 'Eight-Twelve'. Under irrigated conditions Charles is 8cm shorter than 88Ab536-B and 5cm shorter than Eight-Twelve.

The following were developed by J.U. Gellatly, West Bank, British Columbia, Canada. Donated by Michael Carlson, British Columbia Ministry of Forests, Kalamalka Forest Centre, 3401 Reservoir Road, Vernon, British Columbia V1B 2C7, Canada; Vicky Berger, British Columbia Ministry of Forests, Kalamalka Forest Centre, 3401 Reservior Road, Vernon, British Columbia V1B 2C7, Canada. Received 01/25/2001.

PI 637846. Corylus hybrid
Cultivar. Big Red; CCOR 718. Pedigree - C. avellana x Manchurian hazel or C. a x Peace River cornuta.

PI 637847. Corylus hybrid
Cultivar. Myoka; CCOR 719. Pedigree - C. avellana x Manchurian hazel or C. a x Peace River cornuta.

PI 637848. Corylus hybrid
Cultivar. Nutwasher; CCOR 720. Pedigree - selection of wild cornuta.

PI 637849. Corylus hybrid
Cultivar. Super Big Red; CCOR 721. Pedigree - selection of European hazelnut.

PI 637850. Corylus hybrid
Cultivar. Large Early; CCOR 722. Pedigree - selection of European hazelnut.

PI 637851. Corylus hybrid
Cultivar. Gellatly Special; CCOR 723. Pedigree - selection of European hazelnut.

The following were donated by Michael Carlson, British Columbia Ministry of Forests, Kalamalka Forest Centre, 3401 Reservoir Road, Vernon, British Columbia V1B 2C7, Canada; Vicky Berger, British Columbia Ministry of Forests, Kalamalka Forest Centre, 3401 Reservior Road, Vernon, British Columbia V1B 2C7, Canada. Received 01/25/2001.

PI 637852. Corylus cornuta Marshall
Cultivar. Peace River; CCOR 724. Pedigree - selection of wild C. cornuta from Peace River.

The following were developed by J.U. Gellatly, West Bank, British Columbia, Canada. Donated by Michael Carlson, British Columbia Ministry of Forests, Kalamalka Forest Centre, 3401 Reservoir Road, Vernon, British Columbia V1B 2C7, Canada; Vicky Berger, British Columbia Ministry of Forests, Kalamalka Forest Centre, 3401 Reservior Road, Vernon, British Columbia V1B 2C7, Canada. Received 01/25/2001.

PI 637853. Corylus hybrid
Cultivar. Nearoka; CCOR 726. Pedigree - C. avellana x C. colurna (tree hazel).

PI 637854. Corylus hybrid
Cultivar. SE 3; CCOR 727. Pedigree - selection of European hazelnut.

PI 637855. Corylus hybrid
Cultivar. SE 4; CCOR 728. Pedigree - selection of European hazelnut.

PI 637856. Corylus hybrid
Cultivar. SE 6; CCOR 730. Pedigree - selection of European hazelnut.

PI 637857. Corylus hybrid
Cultivar. SE 7; CCOR 731. Pedigree - selection of European hazelnut.

PI 637858. Corylus hybrid
Cultivar. SE 9; CCOR 732. Pedigree - selection of European hazelnut.

PI 637859. Corylus hybrid
Cultivar. SE 15; CCOR 733. Pedigree - selection of European hazelnut.

PI 637860. Corylus hybrid
Cultivar. Normoka; CCOR 734. Pedigree - selection of European hazelnut.

The following were donated by Michael Carlson, British Columbia Ministry of Forests, Kalamalka Forest Centre, 3401 Reservoir Road, Vernon, British Columbia V1B 2C7, Canada; Vicky Berger, British Columbia Ministry of Forests, Kalamalka Forest Centre, 3401 Reservior Road, Vernon, British Columbia V1B 2C7, Canada. Received 01/25/2001.

PI 637861. Corylus hybrid
Cultivar. Comet; CCOR 735. Pedigree - selection of European hazelnut. Originated in Westbank, British Columbia, Canada, by J.U. Gellatly. Introduced in 1928. Seedling of unknown parentage. Nut: very attractive; long, thin shell; kernel clean, smooth, plump. Tree: produces good crops if cross-pollinated. Now obsolete.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 03/30/2001.

PI 637862. Corylus sp.
Cultivar. 542.102; CCOR 738.

The following were donated by National Fruit Collection, Brogdale Horticultural Trust, Brogdale Road, Kent, England ME13 8XZ, United Kingdom. Received 02/27/2001.

PI 637863. Corylus avellana L.
Cultivar. "Gosse Kugelnuss"; CCOR 741.

PI 637864. Corylus avellana L.
Cultivar. "Kurzhullige Zellernuss"; CCOR 742.

PI 637865. Corylus avellana L.
Cultivar. "Minna's Zellernuss"; CCOR 743.

PI 637866. Corylus avellana L.
Cultivar. "Volle Zellernuss"; CCOR 744.

The following were donated by Hakan Schuberg, Gluntens Vag 9-807, Umea, Vasterbotten 903 31, Sweden. Received 04/10/2001.

PI 637867. Corylus avellana L.
Cultivated. CCOR 745; Alvare Arboretum. Pedigree - selection from Alvare Arboretum.

The following were collected by Erica E. Benson, University of Abertay-Dundee, School of Science and Engineering, Division of Molecular and Life Sciences, Dundee, Scotland DD1 1HG, United Kingdom. Received 03/16/2001.

PI 637868. Corylus avellana L.
Wild. Berriedale Tree 1; CCOR 746. Collected 2001 in Scotland, United Kingdom. Pedigree - Collected from the wild in Scotland. One of three known wild hazelnut trees in the north part of the Orkney island of Hoy. Cuttings were collected in March, 2001 with the permission of the Scottish Natural Heritage under section 28(5) of the wildlife and countryside act in a collaboration with Erica Benson at the University of Abertay in Dundee, Scotland in an effort to propagate these trees for conservation and re-introduction. PI 637868 and PI 637869 are from the Berriedale wood north of Rackwick, and PI 637870 is nea The Bu Ruins at the northeast end of the island. -- Correspondence from E.E. Benson to B.M. Reed at NCGR Corvallis, March, 2001.

PI 637869. Corylus avellana L.
Wild. Berriedale Tree 2; CCOR 747. Collected 2001 in Scotland, United Kingdom. Pedigree - Collected from the wild in Scotland. One of three known wild hazelnut trees in the north part of the Orkney island of Hoy. Cuttings were collected in March, 2001 with the permission of the Scottish Natural Heritage under section 28(5) of the wildlife and countryside act in a collaboration with Erica Benson at the University of Abertay in Dundee, Scotland in an effort to propagate these trees for conservation and re-introduction. PI 637868 and PI 637869 are from the Berriedale wood north of Rackwick, and PI 637870 is nea The Bu Ruins at the northeast end of the island. -- Correspondence from E.E. Benson to B.M. Reed at NCGR Corvallis, March, 2001.

PI 637870. Corylus avellana L.
Wild. The Bu (Tree1); CCOR 748. Collected 2001 in Scotland, United Kingdom. Pedigree - Collected from the wild in Scotland. One of three known wild hazelnut trees in the north part of the Orkney island of Hoy. Cuttings were collected in March, 2001 with the permission of the Scottish Natural Heritage under section 28(5) of the wildlife and countryside act in a collaboration with Erica Benson at the University of Abertay in Dundee, Scotland in an effort to propagate these trees for conservation and re-introduction. PI 637868 and PI 637869 are from the Berriedale wood north of Rackwick, and PI 637870 is nea The Bu Ruins at the northeast end of the island. -- Correspondence from E.E. Benson to B.M. Reed at NCGR Corvallis, March, 2001.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 02/2001.

PI 637871. Corylus avellana L.
Cultivar. "Vistula"; CCOR 749.

PI 637872. Corylus avellana L.
Cultivar. "Tapparona di Mezzanego"; CCOR 750. Collected in Liguria, Italy.

PI 637873. Corylus avellana L.
Cultivar. "Pruhovany"; CCOR 751.

PI 637874. Corylus avellana L.
Cultivar. "Rimsky"; CCOR 752.

PI 637875. Corylus avellana L.
Cultivar. "Obrovsky Novy"; CCOR 753.

PI 637876. Corylus avellana L.
Cultivar. "d'Algers"; CCOR 754.

PI 637877. Corylus avellana L.
Cultivar. "Hempelov Zellsky"; CCOR 755.

PI 637878. Corylus avellana L.
Cultivar. 556.019; CCOR 756.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Nick Vorsa, Rutgers University, Blueberry & Cranberry, Research Station, Chatsworth, New Jersey 08109, United States; Pavel Cherbukin, Vavilov Research Institute, Far Eastern Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation; Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/31/2001.

PI 637879. Corylus sieboldiana var. mandshurica (Maxim.) C. K. Schneid. Wild. HVSC-056; CCOR 759. Collected in Khabarovsk, Russian Federation. Latitude 47° 23' 30" N. Longitude 134° 32' 55" E. Elevation 70 m. Mosquito ridden area with medium drained humus/duff soil, surrounded by Acer, Populus, Syringa mandshurica, Juglands- mandshurica. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 637880. Corylus heterophylla Fisch. ex Trautv. Wild. HVSC-069; CCOR 760. Collected in Khabarovsk, Russian Federation. Latitude 49° 8' 18" N. Longitude 136° 30' 52" E. Elevation 42 m. Located near the road on the edge of a forest with NE exposure, on a flat sandy loam with medium drainage surrounded by White birches, Alms, Grasses, Salix population. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 637881. Corylus sieboldiana var. mandshurica (Maxim.) C. K. Schneid. Wild. HVSC-073; CCOR 761. Collected in Khabarovsk, Russian Federation. Latitude 49° 23' 32" N. Longitude 137° 40' 39" E. Elevation 364 m. Near the road on the edge of a forest with 10% NE exposure, on moderate (40 deg.) slope in a sandy loam with medium drainage surrounded by Maples firs Anus Koreanus, Ragweed Copper birch, Polygonum, Actunidia, Kolomikta, Asters. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

The following were developed by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States; Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States; Luigi Meneghelli, Oregon State University, Department of Horticulture, Corvalis, Oregon 97331, United States. Received 04/04/2002.

PI 637882. Corylus avellana L. Cultivar. "Gamma"; OSU 589.028; CCOR 776. Pedigree - Casina x VR 6-28.

PI 637883. Corylus avellana L. Cultivar. "Delta"; OSU 510.041; CCOR 777. Pedigree - OSU 249.159 x VR 17-15.

PI 637884. Corylus avellana L. Cultivar. "Epsilon"; OSU 669.073; CCOR 778. Pedigree - OSU 350.089 x Zimmerman.

PI 637885. Corylus avellana L.
Cultivar. "Zeta"; OSU 670.095; CCOR 779. Pedigree - OSU 342.019 x Zimmerman.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 05/31/2002.

PI 637886. Corylus cornuta Marshall
Cultivar. CCOR 801. Collected in Manitoba, Canada. Elevation 0 m. Pedigree - selection from the wild in Manitoba.

The following were collected by Rick Sawatzky, University of Saskatchewan, Department of Horticultural Sciences, Saskatoon, Saskatchewan S7N 0W0, Canada. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 05/31/2002.

PI 637887. Corylus cornuta Marshall
Cultivar. CCOR 802. Collected in Saskatchewan, Canada. Elevation 0 m. Pedigree - selection from the wild in Saskaatchewan.

The following were collected by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 05/31/2002.

PI 637888. Corylus cornuta Marshall
Cultivar. CCOR 803. Collected in New York, United States. Elevation 0 m. Pedigree - selection from the wild in New York.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, U.S. Peace Corps, Cuerpo de Paz, Casilla #749, Sucre, Chuquisaca, Bolivia; Isabella Arevshatyan, Yerevan, Armenia; Mariam Emyan, USDA, Marketing Assistance Program, Armenia; Eleonora Gabrielian, Department of Plant Systemics, Geography National Academie of Sciences, Institute of Botany, Yerevan, Armenia; Samvel M. Gasparian, Scientific Research Center of Viticulture, Fruit Growing and Wine Making, Merdzavan, Armenia; Vrez Manakyan, Armenia Academie of Science, Institute of Botany, Yerevan, Armenia; Ashot A. Charchoglian, National Academie of Sciences, Institute of Botany, Yerevan, Armenia. Donated by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 06/27/2002.

PI 637889. Corylus colurna L.
Cultivated. CCOR 805. Collected 08/20/2001 in Armenia. Pedigree - Collected from the wild in Armenia.

The following were collected by Paul Meyer, The University of Pennsylvania, Morris Arboretum, 9414 Meadowlark Avenue, Philadelphia, Pennsylvania 19118, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Gagik Movsisyan, Armenia; Alan Whittemore, U.S. National Arboretum, USDA, ARS, 3501

New York Avenue, NE, Washington, District of Columbia 20002-1958, United States; Ashot A. Charchoglian, National Academie of Sciences, Institute of Botany, Yerevan, Armenia; Pavel Humbaryan, Armenia Institute of Botany, Yerevan, Armenia; Yura Paityan, Armenia Institute of Botany, Yerevan, Armenia. Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/11/2002.

PI 637890. Corylus avellana L.
Wild. Kapan; NA 72627; CCOR 806. Collected in Armenia. Latitude 39° 12' 31" N. Longitude 46° 24' 13" E. Elevation 810 m. Purchased in open market at Kapan, Syunik Marz province. Collected 09/01/2002 in Armenia. Latitude 39° 12' 31" N. Longitude 46° 24' 13" E. Elevation 810 m. Purchased in open market at Kapan, Syunik Marz province. Pedigree – Collected from the wild in Armenia.

PI 637891. Corylus avellana L.
Cultivated. Micha; NA 72669; CCOR 808. Collected in Armenia. Latitude 39° 12' 31" N. Longitude 46° 24' 13" E. Elevation 810 m. Purchased in open market at Kapan, Syunik Marz province. Collected 09/02/2002 in Armenia. Latitude 39° 12' 31" N. Longitude 46° 24' 13" E. Elevation 810 m. Purchased in open market at Kapan, Syunik Marz province. Pedigree - Collected from the wild in Armenia.

PI 637892. Corylus avellana L.
Wild. Vodka Man - Wild; NA 72672; CCOR 811. Collected in Armenia. Latitude 39° 12' 31" N. Longitude 46° 24' 13" E. Elevation 810 m. Purchased in open market at Kapan, Syunik Marz province. Collected 09/02/2002 in Armenia. Latitude 39° 12' 31" N. Longitude 46° 24' 13" E. Elevation 810 m. Purchased in open market at Kapan, Syunik Marz province. Pedigree - Collected from the wild in Armenia.

PI 637893. Corylus avellana L.
Cultivated. Shnogh; NA 72791; CCOR 813. Collected in Armenia. Latitude 40° 48' N. Longitude 44° 28' E. Elevation 1350 m. Purchased in open market in Vanadzor, Lori Marz province. Collected 09/12/2002 in Armenia. Latitude 40° 48' N. Longitude 44° 28' E. Elevation 1350 m. Purchased in open market in Vanadzor, Lori Marz province. Pedigree - Collected from the wild in Armenia.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 11/26/2002.

PI 637894. Corylus cornuta Marshall
Breeding. CCOR 814. Pedigree - selection from the wild in Minnesota.

PI 637895. Corylus cornuta Marshall
Breeding. CCOR 815. Pedigree - selection from the wild in New York.

PI 637896. Corylus cornuta Marshall
Breeding. CCOR 816. Pedigree - selection from the wild in Wisconsin.

PI 637897. Corylus cornuta Marshall
Breeding. CCOR 817. Pedigree - selection from the wild in Maine.

PI 637898. Corylus cornuta Marshall
Breeding. CCOR 818. Pedigree - selection from the wild in Quebec.

PI 637899. Corylus cornuta Marshall
Breeding. CCOR 819. Pedigree - selection from the wild in North Dakota.

PI 637900. Corylus cornuta Marshall
Breeding. CCOR 820. Pedigree - selection from the wild in Manitoba.

PI 637901. Corylus cornuta Marshall
Breeding. CCOR 821. Pedigree - selection from the wild in British Columbia.

The following were donated by Paul Meyer, The University of Pennsylvania, Morris Arboretum, 9414 Meadowlark Avenue, Philadelphia, Pennsylvania 19118, United States. Received 12/18/2002.

PI 637902. Corylus fargesii (Franch.) C. K. Schneid.
Cultivated. CCOR 822. Collected in Gansu, China. Latitude 34° 18' 15" N. Longitude 106° 12' 27" E. Elevation 1650 m. Gansu Province, Tian Shui City District, Xiao Long Shan Forest Bureau, Danh Chuan Forest Station, Mai Chao Gou. Two meters above a stream in an open woodland setting along a path in the zone where periodic flooding takes place. Growing among rocks in silt loam soils deposited by stream; with Lonicera sp., Juglans sp., Salix sp., Carpinus sp., Quercus sp. and serveral herbaceous species. Pedigree - Selection from the wild in Gansu, China. Single-stemmed, deciduous trees with pyramidal spreading habit; seed collected from more than 5 plants; 12-15 m tall; 15-25 cm DBH; papery copper exfoliating bark - exquisite! Beautiful tree that is threatened or rare according to the Chinese Red Data Book, but grows here in large numbers; the bark on young trees looks a lot like immature Betula nigra bark. 1996 Expedition to Shaanxi and Gansu Provinces (collected as QLG 231 on 4 October 1996).

PI 637903. Corylus fargesii (Franch.) C. K. Schneid.
Cultivated. CCOR 823. Pedigree - Selection from the wild in Gansu, China. Single-stemmed, deciduous trees with pyramidal spreading habit; seed collected from more than 5 plants; 12-15 m tall; 15-25 cm DBH; papery copper exfoliating bark - exquisite! Beautiful tree that is threatened or rare according to the Chinese Red Data Book, but grows here in large numbers; the bark on young trees looks a lot like immature Betula nigra bark. 1996 Expedition to Shaanxi and Gansu Provinces (collected as QLG 231 on 4 October 1996).

PI 637904. Corylus fargesii (Franch.) C. K. Schneid.
Cultivated. CCOR 824. Pedigree - Selection from the wild in Gansu, China. Single-stemmed, deciduous trees with pyramidal spreading habit; seed collected from more than 5 plants; 12-15 m tall; 15-25 cm DBH; papery copper exfoliating bark - exquisite! Beautiful tree that is threatened or rare according to the Chinese Red Data Book, but grows here in large numbers; the bark on young trees looks a lot like immature Betula nigra bark. 1996 Expedition to Shaanxi and Gansu Provinces (collected as QLG 231 on 4 October 1996).

PI 637905. Corylus fargesii (Franch.) C. K. Schneid.
Cultivated. CCOR 825. Pedigree - Selection from the wild in Gansu,

China. Single-stemmed, deciduous trees with pyramidal spreading habit; seed collected from more than 5 plants; 12-15 m tall; 15-25 cm DBH; papery copper exfoliating bark - exquisite! Beautiful tree that is threatened or rare according to the Chinese Red Data Book, but grows here in large numbers; the bark on young trees looks a lot like immature Betula nigra bark. 1996 Expedition to Shaanxi and Gansu Provinces (collected as QLG 231 on 4 October 1996.).

PI 637906. Corylus fargesii (Franch.) C. K. Schneid.
Cultivated. CCOR 826. Pedigree - Selection from the wild in Gansu, China. Single-stemmed, deciduous trees with pyramidal spreading habit; seed collected from more than 5 plants; 12-15 m tall; 15-25 cm DBH; papery copper exfoliating bark - exquisite! Beautiful tree that is threatened or rare according to the Chinese Red Data Book, but grows here in large numbers; the bark on young trees looks a lot like immature Betula nigra bark. 1996 Expedition to Shaanxi and Gansu Provinces (collected as QLG 231 on 4 October 1996).

PI 637907. Corylus fargesii (Franch.) C. K. Schneid.
Cultivated. CCOR 827. Pedigree - Selection from the wild in Gansu, China. Single-stemmed, deciduous trees with pyramidal spreading habit; seed collected from more than 5 plants; 12-15 m tall; 15-25 cm DBH; papery copper exfoliating bark - exquisite! Beautiful tree that is threatened or rare according to the Chinese Red Data Book, but grows here in large numbers; the bark on young trees looks a lot like immature Betula nigra bark. 1996 Expedition to Shaanxi and Gansu Provinces (collected as QLG 231 on 4 October 1996).

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 05/23/2003.

PI 637908. Corylus avellana L.
Cultivar. CCOR 831. From Australia (Basil Baldwin, Orange Agricultural College, University of Sydney, Orange, New South Wales, Australia), appears to be good kernel type. Shawn Mehlenbacher 5/23/2003.

PI 637909. Corylus avellana L.
Cultivar. CCOR 832.

PI 637910. Corylus avellana L.
Cultivar. CCOR 833.

PI 637911. Corylus avellana L.
Cultivar. CCOR 834.

PI 637912. Corylus avellana L.
Cultivar. CCOR 835.

PI 637913. Corylus avellana L.
Cultivar. CCOR 836.

PI 637914. Corylus avellana L.
Cultivar. CCOR 837.

PI 637915. Corylus avellana L.
Cultivar. CCOR 838.

PI 637916. Corylus avellana L.
Cultivar. CCOR 839.

PI 637917. Corylus avellana L.
Cultivar. CCOR 840.

PI 637918. Corylus avellana L.
Cultivar. CCOR 841.

PI 637919. Corylus avellana L.
Cultivar. CCOR 842.

PI 637920. Corylus avellana L.
Cultivar. CCOR 843.

PI 637921. Corylus avellana L.
Cultivar. CCOR 844.

PI 637922. Corylus avellana L.
Cultivar. CCOR 845.

The following were donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/16/1997.

PI 637923. Corylus sp.
Clone. CCOR 9000; Corylus Virus Collection. Pedigree - selections which contain specific virus.

The following were developed by Royce S. Bringhurst, University of California, Dept. Pomology, Wickson Hall, Davis, California 95616, United States. Donated by Margaret M. Stahler, USDA/SCS, Plant Materials Center, 3415 NE Granger, Corvallis, Oregon 97333, United States; Cheryl L. Covert, University of California, Foundation Plant Materials Service, 1 Shields Avenue, Davis, California 95616-8600, United States. Received 10/21/1991.

PI 637924. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Parker"; CFRA 1015. 5263. Pedigree - Douglas x (Tufts x 63.7.101). Fruit: medium to large; stems short; flavor very good; resembles Sparta but not as firm. Plant: everbearer; makes runners quite freely for an everbearer; needs little or no winter protection in area of origination. Brooks and Olmo, 1972. There is another cultivar from Canada called 'Parker'. This cultivar is described in Brooks and Olmo, 1972, but is not this cultivar. This cultivar was selected and named in California by Bringhurst.

The following were developed by Karin Trajkovski, Swedish Univ. of Ag. Sciences, Balsgard, Dept. Hort. Plants, Fjalkestadsvagen 123-1, Kristianstad, Kristianstad S-291 94, Sweden. Donated by Hugh A. Daubeny, Agriculture Canada, Vancouver Experiment Station, 6660 N.W. Marine Drive, Vancouver, British Columbia V6T 1X2, Canada; Margie Luffman, Agriculture & Agri-Food

Canada, Canadian Clonal Genebank, GPCRC, Harrow, Ontario N0R 1G0, Canada. Received 12/01/1991.

PI 637925. Fragaria x vescana Rud. Bauer & A. Bauer
Cultivar. "Sara"; CANADA FRA1684; CFRA 1028. Pedigree - Annelie x [(Sparkle x F. vesca 4x) open pollinated]. Strong vigor and dense, upright growth habit producing many runners. Fruit with a better vesca flavor than Annelie.

The following were collected by Gunter Staudt, Bachelhurst 10A, Merzhausen, Germany. Received 11/04/1992.

PI 637926. Fragaria pentaphylla Losinsk.
Wild. F. pentaphylla from China; CFRA 1198. Collected 1992 in Sichuan, China. Elevation 2400 m. About 150 km west of Ching du, Sichuan, China. Pedigree - Collected from the wild in China.

The following were collected by Lance Day, 2830 Devel's Hall Acre Road, Accident, Maryland 21520, United States. Received 11/06/1995.

PI 637927. Fragaria virginiana Mill.
Wild. F. virginiana; CFRA 1430. Collected 07/1995 in Maryland, United States. Pedigree - collected from the wild in Maryland. From the Strawberry Project - an experiment in wide-area germplasm collection through posting on the internet.

The following were collected by R. Buttner, Genebank For Fruit, Dorfplatz 2, Dresden, Saxony D-01326, Germany. Received 10/02/1996.

PI 637928. Fragaria moschata Weston
Wild. F. moschata Nr. 1 'Cotta'; CFRA 1508. Collected 1994 in Saxony, Germany. Latitude 52° 45' N. Longitude 9° 0' E. Elevation 360 m. landscape: Elbe river hills. Basaltic rocks, neutral humus over basaltic gravel and loam along bushy edges of forest. Pedigree - Selection of wild F. moschata from Saxony, Germany.

PI 637929. Fragaria viridis Weston
Wild. F. viridis Nr. 10 'Stora Karlso'; CFRA 1513. Collected 1995 in Sweden. Pedigree - collected from the wild in Stora Karlso, Sweden.

The following were donated by Cheryl L. Covert, University of California, Foundation Plant Materials Service, 1 Shields Avenue, Davis, California 95616-8600, United States. Received 03/12/1998.

PI 637930. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Fern"; CN12; Cal 72.8-105; CFRA 1665. 5267. Pedigree - Tufts x Cal. 69.62-103.

The following were donated by Neil Bell, Oregon State University, North Willamette Experiment Station, Aurora, Oregon, United States. Received 03/12/1999.

PI 637931. Fragaria nubicola (Hook. f.) Lindl. ex Lacaita
Wild. F. nubicola; CFRA 1797. Collected in Nepal. Pedigree - Collected from the wild in Nepal.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Barbara Reed, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 06/29/2001.

PI 637932. Fragaria virginiana Mill.
Wild. KH 2001-01; CFRA 1799. Collected 06/25/2001 in Colorado, United States. Latitude 40° 23' 59" N. Longitude 105° 38' 35" W. Elevation 2792 m. Beaver Ponds on U.S. 34 about 17 km west of junction with U.S. 36 in Estes Park, Colorado. Pedigree - Collected from the wild in Colorado.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Nick Vorsa, Rutgers University, Blueberry & Cranberry, Research Station, Chatsworth, New Jersey 08109, United States; Pavel Cherbukin, Vavilov Research Institute, Far Eastern Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation; Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/31/2001.

PI 637933. Fragaria orientalis Losinsk.
Wild. HVSC-001; CFRA 1801. Collected 08/09/2001 in Primorye, Russian Federation. Latitude 43° 13' 38" N. Longitude 132° 3' 59" E. Elevation 285 m. Top of ridge between two bays of the peninsula northeast of Vladivostok. Well-drained gravely humus. Caryoph, Viburnum, Rubus, Solidago, Rumex, Crataegus, Crataegifolius,Malus bacata, Acer, Populus, Quercus, Lespeditza bicolor, Vitis amurensis, Plantain and harebells. 20 degree slope facing southward. Pedigree - Collect from the Wild in the Primorye, Russian Federation.

PI 637934. Fragaria orientalis Losinsk.
Wild. HVSC-035; CFRA 1803. Collected 08/11/2001 in Primorye, Russian Federation. Latitude 44° 41' 57" N. Longitude 135° 32' 59" E. Elevation 622 m. Primorye region. Area with medium drainage, 80% exposure. Water hemlock, Rubus sacchalinensis, Poteatilla, Betula platypettala also present. Pedigree - Collect from the Wild in the Primorye, Russian Federation.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/24/2001.

PI 637935. Fragaria virginiana Mill.
Wild. F. virginiana; CFRA 1804. Collected 09/12/2001 in Michigan, United States. Pedigree - Collected from the wild in Michigan.

The following were donated by Plant Research International, Building 107, Droevendaalsesteeg 1, Wageningen, Gelderland 6708 PB, Netherlands. Received 01/15/2002.

PI 637936. Fragaria x ananassa Duchesne ex Rozier
Cultivar. 90537-3; CFRA 1805.

The following were developed by John Hartung, USDA, ARS, Plant Germplasm Quarantine Office, Building 010A, Room 327, BARC-West, Beltsville, Maryland 20705-2350, United States; John Maas, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States; Stan Hokanson, USDA, ARS, Fruit Laboratory, Building 010A, Room 210, BARC-West, Beltsville, Maryland 20705, United States. Donated by John Maas, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States. Received 02/20/2002.

PI 637937. Fragaria virginiana Mill.
Cultivar. US 4808; SG-89; CFRA 1806. Pedigree - Collected from the wild in Minnesota.

PI 637938. Fragaria x ananassa Duchesne ex Rozier
Cultivar. US 4809; 80-4-38; CFRA 1807. Pedigree - Earliglow x Fragaria virginiana clone SG-26.

The following were collected by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 12/07/2001.

PI 637939. Fragaria orientalis Losinsk.
Wild. HVSC-120; CFRA 1808. Collected in Primorye, Russian Federation. Elevation 0 m. Bogataya River basin near Vadivostok, Primorye. Collected 08/2001 in Primorye, Russian Federation. Elevation 0 m. Bogataya River basin near Vadivostok, Primorye. Pedigree - Collect from the Wild in the Primorye, Russian Federation.

PI 637940. Fragaria orientalis Losinsk.
Wild. HVSC-121; CFRA 1809. Collected in Primorye, Russian Federation. Elevation 0 m. Near Artern, Primorye. Collected 08/2001 in Primorye, Russian Federation. Elevation 0 m. Near Artern, Primorye. Pedigree - Collect from the Wild in the Primorye, Russian Federation.

PI 637941. Fragaria x ananassa Duchesne ex Rozier
Wild. HVSC-122; CFRA 1810. Collected in Sakhalin, Russian Federation. Elevation 0 m. Sakhalin Island. Collected 08/2001 in Sakhalin, Russian Federation. Elevation 0 m. Sakhalin Island. Pedigree - Collect from the Wild in the Sakhalin, Russian Federation.

The following were collected by James F. Hancock, Michigan State University, Deptartment of Horticulture, Plant and Soil Science A 342, East Lansing, Michigan 48824-1325, United States; Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Chris Heider, P.O. Box 1594, Philomath, Oregon 97370, United States.

Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 07/2002.

PI 637942. Fragaria chiloensis (L.) Mill.
Cultivated. CFRA 1811. Collected in Tungurahua, Ecuador. Elevation 2900 m. Commercial field 2 km east of Huachi Grande. Field of Victor and Manual Salinas. Sandy volcanic soil. 35 cm annual rainfall, plants are not irrigated. Field has been in Hurachi strawbery for 100-250 years. One plant per 0.3 square meter. Solanaceous, tomatillo type plants grew among the berries. Pedigree - Collected from commercial field.

The following were collected by Paul Meyer, The University of Pennsylvania, Morris Arboretum, 9414 Meadowlark Avenue, Philadelphia, Pennsylvania 19118, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Gagik Movsisyan, Armenia; Alan Whittemore, U.S. National Arboretum, USDA, ARS, 3501 New York Avenue, NE, Washington, District of Columbia 20002-1958, United States; Ashot A. Charchoglian, National Academie of Sciences, Institute of Botany, Yerevan, Armenia; Pavel Humbaryan, Armenia Institute of Botany, Yerevan, Armenia; Yura Paityan, Armenia Institute of Botany, Yerevan, Armenia. Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/11/2002.

PI 637943. Fragaria vesca L.
Wild. CFRA 1812. Collected in Armenia. Latitude 40° 36' 32" N. Longitude 44° 32' 55" E. Elevation 2120 m. Hankavan Valley in Kotayk Marz province. Along roadside on coppiced hillside with Quercus macranthera, Acer platanoides and Sorbus aucuparia. Collected 09/06/2002 in Armenia. Latitude 40° 36' 32" N. Longitude 44° 32' 55" E. Elevation 2120 m. Hankavan Valley in Kotayk Marz province. Along roadside on coppiced hillside with Quercus macranthera, Acer platanoides and Sorbus aucuparia. Pedigree - Collected from the wild in Armenia.

The following were donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 03/08/2002.

PI 637944. Fragaria x ananassa Duchesne ex Rozier
Cultivar. CFRA 1813. Pedigree - San Miguel Open Pollinated.

The following were collected by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 10/29/2002.

PI 637945. Fragaria orientalis Losinsk.
Wild. F. orientalis Artem City; Artem City; CFRA 1814. Collected 07/23/2002 in Primorye, Russian Federation. Elevation 0 m. 10 km from Artem City. Pedigree - Collected from the wild in Primorye, Russian Federation.

The following were collected by Douglas Cook, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States;

James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Jodi Jackson, USDA/ARS/NCGR, 33447 Peoria Road, Corvalis, Oregon 97333-2521, United States. Donated by James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/23/2002.

PI 637946. Fragaria virginiana subsp. glauca (S. Watson) Staudt
Wild. F. virginiana subsp. glauca OCJ-8; OCJ-08; CFRA 1816. Collected 09/11/2002 in Colorado, United States. Latitude 35° 42' 9" N. Longitude 105° 41' 11" W. Elevation 2298 m. Continental Divide, Rabbit Ears Pass, Jackson county side, north of US-40 on path 20m from parking area. Alpine Pinus contorta and Picea sp. Pedigree - Collected from the wild in Colorado.

The following were collected by Douglas Cook, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Jodi Jackson, USDA/ARS/NCGR, 33447 Peoria Road, Corvalis, Oregon 97333-2521, United States. Received 09/23/2002.

PI 637947. Fragaria vesca subsp. bracteata (A. Heller) Staudt
Wild. F. vesca subsp. bracteata OCJ-55; OCJ-55; CFRA 1817. Collected 09/19/2002 in New Mexico, United States. Latitude 35° 42' 9" N. Longitude 105° 41' 11" W. Elevation 2298 m. North of Pecos, along State Highway 63 at milepost 16, on cliff side of road. Raparian; Salix sp., Rubus sp. and Ribes aureum. Pedigree - Collected from the wild in New Mexico.

The following were collected by Douglas Cook, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 06/17/2002.

PI 637948. Fragaria virginiana Mill.
Wild. DC2002-1; F. virginiana DC 2002-1; CFRA 1823. Collected 06/15/2002 in Oregon, United States. Latitude 44° 53' 44" N. Longitude 120° 5' 26" W. Elevation 1040 m. Shelton Wayside Park, about 10 miles southeast of Fossil on State Highway 19 in Wheeler county. Open fir and pine woods on weathered volcanic soil. Raparian zone along Service Creek. Pedigree – Collected from the wild in Oregon.

The following were collected by James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 07/28/2003.

PI 637949. Fragaria virginiana Mill.
Wild. F. virginiana Big Maxson Meadow; Big Maxson Meadow; CFRA 1824. Collected 07/17/2003 in California, United States. Latitude 37° 3' 42" N. Longitude 118° 50' 2" W. Elevation 2620 m. Sierra National Forest, John Muir Wilderness Area, North Fork Kings River, just up the trail from Big Maxson Meadow. Pinus contorta forest. Pedigree - Collected from the wild in California.

The following were collected by Xulan Hu, Yunnan Agrotechnical Extension Center, Room 7-4-602, 202 Jiaolin Road, Kunming, Yunnan 650031, China. Received 09/16/2003.

PI 637950. Fragaria nilgerrensis Schltdl. ex J. Gay
Wild. F. nilgerrensis; CFRA 1825; F. nilgerrensis Yunnan. Collected 07/2003 in Yunnan, China. Elevation 0 m. From a mountain (2100m) located in northern Kunming. Pedigree - Collected from the wild in Yunnan, China. This plant was examined by Gunter Staudt. He checked the ploidy through chromosome counts of root tips. Both F. nilgerrensis and F. moupinensis are native to the same region in China. F. nilgerrensis is diploid and F. moupinensis is This is a diploid plant so it must be F. nilgerrensis. This plant is very vigorous and runners prolifically. This plant matches the description of the species for F. nilgerrensis. The fruit skin is ream-colored. The fruit shape is subglobose to depressed subglobose or slightly conoidal. The fruit is aromatic and has a pineapple-like taste. Flowering May-June, fruit June-July.
Notes from Kim Hummer, 30 January 2006.

The following were collected by James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Jodi Smith-Jackson, USDA, ARS, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Donated by James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/22/2003.

PI 637951. Fragaria virginiana Mill.
Wild. OJ-2003-09; CFRA 1826. Collected 09/15/2003 in Arizona, United States. Latitude 31° 51' 37" N. Longitude 109° 16' 17" W. Elevation 2614 m. Cochise county, Cima Cr, along Greenhouse trail, Riparian. Riparian shaded forest. Pedigree - Collected from the wild in Arizonia.

PI 637952. Fragaria virginiana Mill.
Wild. OJ-2003-11; F. virginiana OJ-2003-11; CFRA 1827. Collected 09/15/2003 in Arizona, United States. Latitude 31° 52' 55" N. Longitude 109° 17' 3" W. Elevation 2757 m. Cochise county, Chirichua mountain, along crest trail. Shrub area in burned out forest along ridge. Pedigree – Collected from the wild in Arizonia.

PI 637953. Fragaria virginiana Mill.
Wild. OJ-2003-14; F. virginiana OJ-2003-14; CFRA 1828. Collected 09/17/2003 in New Mexico, United States. Latitude 33° 24' 3" N. Longitude 105° 47' 25" W. Elevation 3018 m. Lincoln county, Sierra Blanca Ski area, North fork Ruidoso r river above ski area, end of hwy 532. Shaded forest floor, Picea englemannii. Pedigree - Collected from the wild in New Mexico.

The following were collected by James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/15/2003.

PI 637954. Fragaria virginiana Mill.
Wild. OJ-2003-20; F. virginiana OJ-2003-20; CFRA 1829. Collected 10/12/2003 in Arizona, United States. Latitude 36° 36' 47" N.

Longitude 112° 11' 12" W. Elevation 2600 m. Road 212 at junction with highway 67, Conoino county, Kaibab Plateau. Dry slope under pinus ponderosa and Pseudotsuga menzesii. Pedigree - Collected from the wild in Arizonia.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 11/05/2003.

PI 637955. Fragaria chiloensis subsp. pacifica Staudt
Wild. Scott Creek KH clone; CFRA 1831. Collected 10/31/2003 in California, United States. Latitude 37° 2' 12" N. Longitude 122° 13' 39" W. Elevation 0 m. Pedigree - Collected from the wild in California.

The following were collected by Tom Sjulin, Driscoll Strawberry Associates, 404 San Juan Road, Watsonville, California 95076-5399, United States. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 11/05/2003.

PI 637956. Fragaria chiloensis subsp. pacifica Staudt
Cultivated. Scott Creek TS clone; CFRA 1832. Collected 1987 in California, United States. Latitude 37° 2' 12" N. Longitude 122° 13' 39" W. Elevation 0 m. Pedigree - Originallly collected from the wild in California.

The following were developed by Oregon State University, Oregon Agriculture Experiment Station, Corvallis, Oregon 97331, United States; USDA/ARS, Oregon Agr. Exp. Station, Corvallis, Oregon 97331, United States; University of Idaho, Idaho Agr. Exp. Sta., Moscow, Idaho, United States; Washington State University, Agricultural Research Center, Hulbert 403, Pullman, Washington 99164-6240, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 11/14/2003.

PI 637957. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Pinnacle"; ORUS 1826-2; CFRA 1833. Pedigree - Laguna x ORUS 1267-250 (Redcrest x ORUS 869-13 (WSU 1623 x Redgem)).

The following were donated by Baldassare Mineo, Siskiyou Rare Plant Nursery, 2825 Cummings Road, Medford, Oregon 97501, United States. Received 12/10/2003.

PI 637958. Fragaria chiloensis (L.) Mill.
Cultivar. 38620; CFRA 1834; Green Pastures.

PI 637959. Fragaria vesca L.
Uncertain. F. vesca 'Albicarpa'; 38640; CFRA 1836. Pedigree - Selection of F. vesca with white fruit.

The following were developed by G. J. Galletta, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States. Received 04/14/2004.

PI 637960. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Pelican"; LAMSUS 87-17-17; CFRA 1844. Pedigree - FL 82-1556P x LA 8311 (LA 2556 x LA 883).

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 05/20/2004.

PI 637961. Fragaria virginiana subsp. platypetala (Rydb.) Staudt
Wild. CFRA 1845. Collected 05/20/2004 in Oregon, United States. Latitude 44° 35' 10" N. Longitude 123° 17' 4" W. Elevation 95 m. From a meadow behind city lot 2775 N.W. 29th Street Corvallis, Oregon. Open field, northwest facing slope with canary grass, Rubus armeniacus and Crataegus sp. Pedigree - Collected from the wild in Oregon.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 637962. Fragaria vesca L.
Wild. HD-2004-13; CFRA 1848. Collected 07/10/2004 in Hokkaido, Japan. Latitude 42° 57' 37" N. Longitude 141° 25' 32" E. Elevation 184 m. Mt. Shirohata (translated: Mt. White Flag), Sapporo City Reforested area, about 0.5 mile from parking lot. Reforested area for Larix kaempferi. Associated vegetation: Trilium, bamboo, Glycera, Dryopteris, Rubus parviflora, Hydrangea, Rubus phoenocolasius, Oxalis, Gallium and Actinidia polygamma. Soil organic duff, north facing slope. Pedigree - Collected in the wild from Hokkaido, Japan.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan. Donated by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 637963. Fragaria iinumae Makino
Wild. HD-2004-15; CFRA 1849. Collected 07/10/2004 in Hokkaido, Japan.

Latitude 42° 51' 24" N. Longitude 141° 5' 44" E. Elevation 823 m. Nakayama Pass on Rt 230 1 hour SE of Sapporo on Jozankei Kokudo parkway. In drainage ditch near road pull off. Open exposure to sun. associated vegetation: Carex, Salix, red and white clover, Aremesia, Rubus idaeus in understory for Betula platyphylla var. japonica. Pedigree - Collected in the wild from Hokkaido, Japan.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan; Shigeru Uemura, Hokkaido University, Field Science Center for Northern Biosphere, North Forest Research Labratory, Nayoro, Hokkaido 096-0071, Japan. Donated by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 637964. Fragaria iinumae Makino
Wild. HD-2004-23; CFRA 1850. Collected 07/13/2004 in Hokkaido, Japan. Latitude 44° 22' 6" N. Longitude 142° 17' E. Elevation 460 m. North Forest Research Laboratory (Tokuda 250 Nayoro), 0.75 km N of the main building growing on edge of road. Associated species: Plantain, Rhus, Polygonum, Artemesia, Bamboo, Rubus idaeus var. aculeatissimus. Pedigree - Collected in the wild from Hokkaido, Japan.

PI 637965. Fragaria iinumae Makino
Wild. HD-2004-25; CFRA 1851. Collected 07/13/2004 in Hokkaido, Japan. Latitude 44° 23' 53" N. Longitude 142° 12' 20" E. Elevation 520 m. North Forest Research Laboratory (Tokuda 250 Nayoro) 2.5 km NE of main building complex, growing on edge of road in research forest. Associated species: Plantain, Rhus, Polygonum, Artemesia, Bamboo and Rubus idaeus var. aculeatissimus. Pedigree - Collected in the wild from Hokkaido, Japan.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan; Mutsumi Takahashi, Hokkaido Governmental Plant Genetic Resources Center (HPGRC), 363-2 Minamitakinokawa, Takikawa, Hokkaido 073-1103, Japan. Donated by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm

Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 637966. Fragaria iinumae Makino
Wild. HD-2004-35; CFRA 1852. Collected 07/14/2004 in Hokkaido, Japan. Latitude 44° 18' 26" N. Longitude 142° 10' 58" E. Elevation 292 m. Shore of Lake Shumarinai near Nayoro and North Forest Research Laboratory. 2.5 km NE of the main building. Clay soil, open exposure to NE. Associated species: Rubus idaeus var. aculeatissimus, Hackweed, Rhus, butterfly weed and red clover. On slope 3 meters from edge of lake. Pedigree – Collected in the wild from Hokkaido, Japan.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan. Donated by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 637967. Fragaria iinumae Makino
Wild. HD-2004-38; CFRA 1853. Collected 07/15/2004 in Hokkaido, Japan. Latitude 44° 46' 2" N. Longitude 142° 10' 59" E. Elevation 144 m. North of Otoineppu-mura on forest trail off of route 275, edge of road. Heavy rocky brown clay with some duff in open exposure. Associated species: under bamboo, Betula platyphylla, big leaf (Petasites giganteus), plantain, Hackweed, Rhus and white clover. Pedigree - Collected in the wild from Hokkaido, Japan.

PI 637968. Fragaria iinumae Makino
Wild. HD-2004-40; CFRA 1854. Collected 07/15/2004 in Hokkaido, Japan. Latitude 44° 46' N. Longitude 142° 9' 55" E. Elevation 436 m. North of Otoineppu-mura, on forest trail off of route 275, Nakagawa Experimental Forest. (map compartment #153). Edge of road with open exposure, heavy rocky brown clay with some duff. Associated species: under bamboo, Betula platyphylla, big leaf(Petasites giganteus), plantain Hackweed, Rhus and white clover. Pedigree - Collected in the wild from Hokkaido, Japan.

PI 637969. Fragaria iinumae Makino
Wild. HD-2004-42; CFRA 1855. Collected 07/16/2004 in Hokkaido, Japan. Latitude 44° 46' 29" N. Longitude 142° 9' 43" E. Elevation 498 m. Mt. Pankesan, on forest trail off of route 275, Nakagawa Experimental Forest. While driving up to summit, at edge of road. Heavy rocky brown clay with some duff, open exposure. Associated species: under bamboo, Betula platyphylla, Alnus, Hydrangea and Lycopodium. Pedigree - Collected in the wild from Hokkaido, Japan.

PI 637970. Fragaria iinumae Makino
Wild. HD-2004-48; CFRA 1856. Collected 07/16/2004 in Hokkaido, Japan. Latitude 44° 51' 24" N. Longitude 142° 8' 57" E. Elevation 599 m. Mt. Pankesan, north of Otoineppu-mura, Nakagawa Experimental Forest. A very sheltered space on trail stairs leading up to the top of mountain. Under bamboo back from the edge of the road in a windy exposed site. Associated species: bamboo, Picea, polypodium, Ilex and Cirsium (thisle). Pedigree - Collected in the wild from Hokkaido, Japan.

PI 637971. Fragaria iinumae Makino
Wild. HD-2004-50; CFRA 1857. Collected 07/16/2004 in Hokkaido, Japan. Latitude 44° 51' 44" N. Longitude 142° 9' 2" E. Elevation 513 m. Mt. Pankesan, north of Otoineppu-mura, Nakagawa Experimental Forest, on the way down the mountain. Nakagawa Experimental Forest on the way down the mountain. could pick some fruit from the car by opening the door Fruit were on the edge of the road. Pedigree - Collected in the wild from Hokkaido, Japan.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, Nat. Ag. and Bio-oriented Res. Organization (NARO), Lab. of Genetic Resources, Dept. of Genetics & Breeding, National Inst. of Fruit Tree Sciences, Tsukuba, Ibaraki 305-8605, Japan. Donated by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 637972. Fragaria iinumae Makino
Wild. HD-2004-53; CFRA 1858. Collected 07/16/2004 in Hokkaido, Japan. Latitude 44° 41' 43" N. Longitude 142° 12' 32" E. Elevation 93 m. Monomanai River, about 3 km N of Nakagawa Experimental Station. Along road edge. Pedigree - Collected in the wild from Hokkaido, Japan.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan. Donated by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 637973. Fragaria iinumae Makino
Wild. HD-2004-63; CFRA 1859. Collected 07/18/2004 in Hokkaido, Japan. Latitude 43° 39' 54" N. Longitude 143° 6' 16" E. Elevation 933 m. at parking turn-off edge of parking lot near Kinshinotaki on provencial route 39. growing around the far edge of the parking turn out looked like recent introduction. Pedigree - Collected in the wild from Hokkaido, Japan.

PI 637974. Fragaria hybrid
Wild. HD-2004-67; CFRA 1861. Collected 07/18/2004 in Hokkaido, Japan. Latitude 43° 40' 45" N. Longitude 143° 23' 43" E. Elevation 616 m. on route 88 about 5 km south from the Route 39 junction near Rubeshibe-cho. at road's edge, open brown-gray soil complex volcanic origin. Pedigree - Collected in the wild from Hokkaido, Japan.

PI 637975. Fragaria nipponica Makino
Wild. HD-2004-71; CFRA 1862. Collected 07/19/2004 in Hokkaido, Japan. Latitude 43° 55' 57" N. Longitude 144° 19' 17" E. Elevation 11 m. Abashiri-Kokusai road plants growing on both sides of the road 5 K east from Route 39. Pedigree - Collected in the wild from Hokkaido, Japan.

PI 637976. Fragaria nipponica Makino
Wild. HD-2004-72; CFRA 1863. Collected 07/19/2004 in Hokkaido, Japan. Latitude 43° 45' 47" N. Longitude 144° 47' 46" E. Elevation 493 m. Konhoku Pass strawberries on both sides of the road and on cross roads and trails. edge of road - open light disturbed location. Pedigree - Collected in the wild from Hokkaido, Japan.

PI 637977. Fragaria nipponica Makino
Wild. HD-2004-73; CFRA 1864. Collected 07/19/2004 in Hokkaido, Japan. Latitude 43° 36' 20" N. Longitude 145° 5' 17" E. Elevation 1 m. on road leading to Barasato Lake. edge of road - open light disturbed location. Pedigree - Collected in the wild from Hokkaido, Japan.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 637978. Fragaria hybrid
Wild. HD-2004-74; CFRA 1865. Collected 07/19/2004 in Hokkaido, Japan. Latitude 43° 25' 25" N. Longitude 145° 15' 8" E. Elevation 11 m. Barasato Lake, about 5 km inland from highway 244 up the Nishibetsu River valley. edge of road - open light disturbed location. Pedigree - Collected in the wild from Hokkaido, Japan.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New

Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan. Donated by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 637979. Fragaria nipponica Makino
Wild. HD-2004-76; CFRA 1866. Collected 07/20/2004 in Hokkaido, Japan. Latitude 43° 21' 7" N. Longitude 145° 45' 47" E. Elevation 13 m. Habomai open field - old pastureland now naturalized with pioneer plants. Open sun. Pedigree - Collected in the wild from Hokkaido, Japan.

PI 637980. Fragaria hybrid
Wild. HD-2004-78; CFRA 1868. Collected 07/20/2004 in Hokkaido, Japan. Latitude 43° 12' 6" N. Longitude 145° 31' 24" E. Elevation 45 m. Ochi-ichi forest along road to entrance of forest. Open edge of road exposed to sun light plants also throughout forest although fruits not present in forest. Pedigree - Collected in the wild from Hokkaido, Japan.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 637981. Fragaria nipponica Makino
Wild. HD-2004-83; CFRA 1869. Collected 07/21/2004 in Hokkaido, Japan. Latitude 42° 58' 6" N. Longitude 144° 43' 36" E. Elevation 50 m. Akkeshi-wan peninsula. along side of road pull off in open sun with Rubus idaeus, Potentilla grass, bigleaf. Pedigree - Collected in the wild from Hokkaido, Japan.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan. Donated by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Thomas Davis, University of New Hampshire, College

of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 637982. Fragaria iinumae Makino
Wild. HD-2004-89; CFRA 1870. Collected 07/22/2004 in Hokkaido, Japan. Latitude 42° 44' 40" N. Longitude 142° 50' 50" E. Elevation 513 m. Tottabetsu River drainage near Mt. Tottabetsudake, about 25 km southwest of Obihiro. Steep forest slope, dark soil, low light. Associated species: Populus, Betulus, Alnus Azalea, Hydrangea and Urtica. Pedigree - Collected in the wild from Hokkaido, Japan.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/23/2004.

PI 637983. Fragaria chiloensis (L.) Mill.
Cultivated. KH-2004-01; F. chiloensis KH-2004-01; CFRA 1871. Collected 08/20/2004 in Washington, United States. Pedigree - Collected from the wild in Washington.

Unknown source. Received 10/16/1997.

PI 637984. Fragaria sp.
Clone.

The following were developed by R.E. Fowler. Donated by Eugene Mielke, Oregon State University, Mid-Columbia Experiment Station, 3005 Experiment Station Drive, Hood River, Oregon 97031, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 02/14/1990.

PI 637985. Pyrus communis L.
Cultivar. "Autumn Red"; Plant Patent 5220; CPYR 2375. Plant Patent 5220; 5220. Pedigree - Random seedling selection from cultivar lot. Fruit is very waxy, highly glossy, with deep red to purple- red skin and white flesh.

The following were developed by Sumio Fukui. Donated by Eugene Mielke, Oregon State University, Mid-Columbia Experiment Station, 3005 Experiment Station Drive, Hood River, Oregon 97031, United States. Received 02/14/1990.

PI 637986. Pyrus communis L.
Cultivar. "Golden Russet Bosc"; "Beurre Bosc - Golden Russet"; Plant Patent 5243; CPYR 2376. Plant Patent 5243; 5243. Pedigree - Sport of cultivar Beurre Bosc. Golden Russet Bosc (CPYR 2376).-A russeted sport of Bosc discovered in Hood River, Oregon, by orchardist Sumio Fukui in 1940. Bud mutation of Beurre Bosc. Plant patent 5243 issued 4 June 1984; assigned to Carlton Plants, Dayton, Oregon Fruit: skin uniformly orange russeted; otherwise identical to ordinary Beurre Bosc in fruit quality, tree habit, phenology, etc. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were donated by D. Lawyer. Received 04/03/1991.

PI 637987. Pyrus xerophila T. T. Yu
Cultivated. CPYR 2433. Collected in China. Pedigree - Seed presumably collected from wild(?) in North China. This species is used as a rootstock in Northern China.

The following were donated by Suzanne Hurtt, USDA, ARS, Plant Germplasm Quarantine Office, Building 580, BARC-East, Beltsville, Maryland 20705-2350, United States; Suzanne Hurtt, USDA, ARS, Plant Germplasm Quarantine Office, Building 580, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 05/04/1995.

PI 637988. Pyrus sp.
Cultivar. "Liu Yue Xian"; CPYR 2545. Developed in China. Released from quarantine in Beltsville. Plants received in this group with 'T' numbers are heat-treated sub clones of the original introductions.

The following were donated by Scott G. West, 511 Azalea Dr., Waynesboro, Mississippi 39367-2601, United States. Received 08/29/1996.

PI 637989. Pyrus communis L.
Cultivar. "Kieffer - Scott West Clone"; CPYR 2578. These are the pear tree cuttings from a pear that is located on Sec. 16 Township 9 Range 7 in Wayne county Mississippi. This pear tree, age 140 years plus, is beleived to be a Bartlett or a Kieffer. It has survived under the most adverse conditons. It is a most delicious and finely textured table pear, according to the donor.

The following were collected by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/28/1997.

PI 637990. Pyrus communis L.
Cultivated. Endicott Pear; CPYR 2595. Collected 07/1997 in Massachusetts, United States. The USDA Agriculture Yearbook, 1925 reports on 'the remarkable fruit tree' in Danversport, Massachusetts. According to the memoir of Governor Endicott's descendant, Samuel Endicott, the tree may have been planted in its present location in 1632, or it may have been transplanted from 'Governor Endecott's garden in Salem.' (The spelling of the family name 'Endecott' was changed to 'Endicott' in the 1700s.) There is a good possibility that the tree came to Massachusetts from England on the ship Arbella in 1630. U.P. Hedrick (The Pears of New York, 1921) wrote that the Endicott Pear Tree was very old and decayed as early as 1763, and that it was injured during a hurricane in 1804, again in 1815, and yet again in 1843. It had been protected by a fence for about 50 years when Hedrick wrote this account, and he estimated its height to be about 80 feet in the late 1800s. Root suckers bore fruit identical to the original tree, which proved to Hedrick that the Endicott Pear was a seedling and not a grafted tree. In 1934 the tree was nearly demolished by another hurricane but again it re-grew from the twisted trunk. It had a run-in with vandals in 1964, who chopped off all the branches and cut the trunk off 6 feet above the

ground. Again it re-sprouted. Scions were collected by J. Postman in July, 1997, to propagate for the Corvallis Repository. The fruit is 'of no particular consequence', according to Hedrick. It is medium in size, unattractive, and coarse textured. But the cultivar has an impressive history and may have useful genetic value in whatever traits have contributed to its great longevity. Today (2002) the tree is secured by a chain-link fence behind the Osram Sylvania Company building on Endicott Street in Danvers, Massachusetts. -- J. Postman 2002.

Unknown source. Received 10/14/1999.

PI 637991. Pyrus sp.
Cultivated. CPYR 2709.

The following were donated by USDA, ARS, Plant Germplasm Quarantine Center, BLDG 320, BARC-E, Beltsville, Maryland 20705, United States. Received 01/30/2001.

PI 637992. Pyrus communis L.
Cultivar. "A20"; "A-20"; CPYR 2717. Developed in United Kingdom. Pedigree - Perry Pear seedling selection. Indicator clone for pear bark disorders. Originated in the 1960's at Long Ashton, England. It is a Perry Pear seedling selelcted for producing good symptoms to Pear Vein Yellows and Ring Pattern Mosaic Virus. In 1969, in France, it was found to be a good indicator for Blister Canker disease.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Nick Vorsa, Rutgers University, Blueberry & Cranberry, Research Station, Chatsworth, New Jersey 08109, United States; Pavel Cherbukin, Vavilov Research Institute, Far Eastern Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation; Vera Funtova, N.I. Vavilov All-Russian Institute of Plant Industry, Bolshaya Morskaya St., 44, St. Petersburg, Russian Federation; Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/31/2001.

PI 637993. Pyrus ussuriensis Maxim.
Cultivated. HVSC-107; CPYR 2728. Collected 08/22/2001 in Khabarovsk, Russian Federation. Latitude 48° 55' 10" N. Longitude 136° 14' 38" E. Elevation 62 m. Found in a flat 90% exposed piece of soil with Malus baccata Pextail grasses present.

PI 637994. Pyrus ussuriensis Maxim.
Cultivar. HVSC-108; "Lukashovka OP"; CPYR 2729. Collected in Khabarovsk, Russian Federation. Latitude 44° 27' 59" N. Longitude 132° 41' 15" E. Elevation 115 m.

PI 637995. Pyrus ussuriensis Maxim.
Cultivar. HVSC-109; "Primorski Sour OP"; CPYR 2730. Collected in Khabarovsk, Russian Federation. Latitude 44° 27' 59" N. Longitude 132° 41' 15" E. Elevation 115 m.

The following were developed by University of Florida, Florida Agr. Exp. Sta., Department of Agronomy, Gainesville, Florida 32611, United States. Donated by Wayne Sherman, University of Florida, Fruit Crops Department, Room 1143, Fifield Hall, Gainesville, Florida 32611, United States. Received 10/28/2001.

PI 637996. Pyrus hybrid
Cultivar. "Flordahome"; Fla. 41-116; CPYR 2731. Pedigree - Tenn (Tennessee 37-20) x Hood. Flordahome (CPYR 2731).-Originated in Gainesville. Florida, by University of Florida, Dept. of Fruit Crops. Tenn (Tennessee 37-20) x Hood. Cross made in 1954; selected in 1970; introduced in 1981. Tested as Florida 41-116. Fruit: large, round-ovate; skin green, tender; flesh white, melting (buttery texture); early ripening, mid to late July, needs to be harvested at hard green stage for maximum aroma and flavor; stores up to 6 weeks at 40 to 45F without significant loss in quality. Tree: upright, semi-compact; highly productive; shorter and more compact than Hood; resistant to fire blight, moderately resistant to leaf spot; low chilling requirement, adapted to north and central Florida; requires cross-pollination. Hood and Pineapple good pollinizer. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were donated by Wayne Sherman, University of Florida, Fruit Crops Department, Room 1143, Fifield Hall, Gainesville, Florida 32611, United States. Received 10/28/2001.

PI 637997. Pyrus hybrid
Cultivar. "Le Conte"; CPYR 2732. Pedigree - Chinese Sand Pear x P. communis. Le Conte is a hybrid between the Chinese Sand pear and a European sort, therefore of the same parentage as Kieffer which it greatly resembles in both tree and fruit. The fruits are rather poorer in quality than those of Kieffer, if that be possible for an edible fruit, and the tree is in no way superior to that of its better-known rival, but it seems to succeed better in warm climates and light soils. There is, therefore, a place for Le Conte in the South, if a pear is wanted for culinary purposes only. The fruits sometimes rot badly at the core, and should usually be harvested as soon as they attain full size. The trees are more susceptible to blight than those of Kieffer. In the South, the trees are often if not usually propagated from cuttings. Le Conte originated in America, and is probably a hybrid between the Chinese Sand pear and some native. It is supposed to have been carried from Philadelphia to Georgia about 1850 by Major Le Conte, and has since been extensited in the southern States for northern markets. In 1885 it was recommended by the Georgia Horticultural Society for cultivation in the middle region of that State. The American Pomological Society added Le Conte to its fruit-catalog in 1883. -- U.P. Hedrick, The Pears of New York, 1921.

The following were developed by N.P. Moyer, University of Guelph, Vineland Station, Guelph, Ontario, Canada. Donated by Margie Luffman, Agriculture & Agri-Food Canada, Canadian Clonal Genebank, GPCRC, Harrow, Ontario N0R 1G0, Canada. Received 03/25/2002.

PI 637998. Pyrus communis L.
Cultivar. "Bartlett - Russet"; CPYR 2737. Pedigree - Bud mutation of Bartlett. Russet Bartlett (CPYR 2737).-Originated in Jordan Harbor (now Vineland Station), Ontario, Canada, by the late N.P. Moyer. Introduced in 1927. Bud mutation of Bartlett; discovered in 1918. Fruit: skin russetted; may be held somewhat longer than Bartlett in ordinary storage; in CA storage, it does not bruise as much as Bartlett; resembles parent. Tree: blooms I to 2 days later than Bartlett, flowers smaller with more pink; defoliates earlier than Bartlett. - Brooks and Olmo Register of Fruitand Nut Varieties.

The following were developed by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 05/09/2002.

PI 637999. Pyrus communis L.
Cultivar. "Striped Anjou"; CPYR 2791. Pedigree - A green striped sport of Columbia Red Anjou. A bud-sport of Columbia Red Anjou with red and green striped fruit. Discovered on 22 August, 2001 by Joseph Postman on a tree of accession CPYR 2377.001 growing in the National Clonal Germplasm Repository pear orchard in Corvallis, Oregon. All the fruit on a single twig exhibited a regular green-striped break in the red chimera. The rest of the tree contained completely red fruit typical of the Columbia Red Anjou cultivar. Bark on the sport exhibited red striations whereas bark on the rest of the tree was evenly pigmented. Several grafts were made from the affected twig. The two trees resulting from these grafts also exhibit pigmented striations in the bark, and will need to be field grown to verify the persistence of the striped fruit characteristic. -- J. Postman, 2002.

The following were collected by Paul Meyer, The University of Pennsylvania, Morris Arboretum, 9414 Meadowlark Avenue, Philadelphia, Pennsylvania 19118, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Gagik Movsisyan, Armenia; Alan Whittemore, U.S. National Arboretum, USDA, ARS, 3501 New York Avenue, NE, Washington, District of Columbia 20002-1958, United States; Ashot A. Charchoglian, National Academie of Sciences, Institute of Botany, Yerevan, Armenia; Pavel Humbaryan, Armenia Institute of Botany, Yerevan, Armenia; Yura Paityan, Armenia Institute of Botany, Yerevan, Armenia . Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/11/2002.

PI 638000. Pyrus salicifolia Pall.
Wild. ARM-02-067; CPYR 2797. Collected 09/03/2002 in Armenia. Latitude 39° 43' 7" N. Longitude 45° 34' 55" E. Elevation 1398 m. Arpa Gorge in the province of Vayotz Dzor Marz. Arid grassland above riparian zone with Eleagnus angustifolia, Fraxinus excelsior and Salix sp. Pedigree - Collected from the wild in Armenia.

PI 638001. Pyrus salicifolia Pall.
Wild. ARM-02-067B; CPYR 2802. Collected 09/03/2002 in Armenia. Latitude 39° 43' 7" N. Longitude 45° 34' 55" E. Elevation 1398 m. Arpa Gorge in the province of Vayotz Dzor Marz. Arid grassland above riparian zone with

Eleagnus angustifolia, Fraxinus excelsior and Salix sp. Pedigree - Collected from the wild in Armenia.

The following were collected by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 12/07/2001.

PI 638002. Pyrus ussuriensis Maxim.
Wild. HVSC-123; CPYR 2804. Collected in Primorye, Russian Federation. Elevation 0 m. In the vicinity of Sad-gorod. Pedigree - Collected from the wild in Primorye, Russian Federation.

PI 638003. Pyrus ussuriensis Maxim.
Wild. HVSC-124; CPYR 2805. Collected in Primorye, Russian Federation. Elevation 0 m. From the Nadezhdinsky district. Pedigree - Collected from the wild in Primorye, Russian Federation. Collected in the wild by Andrey Sabitov in August, 2001 from the Nadezhdinsky district of the Russian far east province of Primorsky.

The following were donated by Samvel M. Gasparian, Scientific Research Center of Viticulture, Fruit Growing and Wine Making, Merdzavan, Armenia. Received 04/15/2003.

PI 638004. Pyrus communis subsp. caucasica (Fed.) Browicz
Wild. Spitaki-1; Sample 33; CPYR 2812. Collected 2002 in Armenia. Latitude 40° 50' 33" N. Longitude 44° 21' 45" E. Elevation 1517 m. Collected near village of Khachakap (formerly Saral) about 5 miles east of Spitak, Lori Marz region. Pedigree - Collected from the wild in Armenia. Spitaki (tr. - of white) 1 - Wild Caucasian pear; found in a homestead of village Khachakap in Lori Marz (Province). It is a tall tree with wide pyramid shape foliage; branches are gray and prickled. Leaves are slightly shaggy from behind and shiny to the upward; rounded; blade is entire, petiole is thin and long. Flower cluster is a buckler (shield). Fruits are rounded 3 to 4 cm in diameter. Pedicel is of medium size. Pulp is tasteless. It is of industrial use. --collection notes sent by Samvel Gasparian on wild and cultivated fruits of Armenia, Ministry of Agriculture, Republic of Armenia, 2002.

PI 638005. Pyrus communis subsp. caucasica (Fed.) Browicz
Wild. Spitaki-2; Sample 34; CPYR 2813. Collected 2002 in Armenia. Latitude 40° 50' 33" N. Longitude 44° 21' 45" E. Elevation 1517 m. Collected near village of Khachakap (formerly Saral) about 5 miles east of Spitak, Lori Marz region. Pedigree - Collected from the wild in Armenia. Spitaki 2 - Wild Caucasian pear; found in village of Khachakap in Lori Marz (Province). It is a tall tree (12 meters height) with wide pyramid shape crown; branches are gray and thorny. Leaves are shiny from above, shaggy from below, round; entire blade, petiole is thin and longer than the leaf. I has buckler (shield) cluster of flowers. Fruit is rounded and very small, 1 to 2 cm in diameter. --collection notes sent by Samvel Gasparian on wild and cultivated fruits of Armenia, Ministry of Agriculture, Republic of Armenia, 2002.

PI 638006. Pyrus communis subsp. caucasica (Fed.) Browicz
Wild. Spitaki-3; Sample 35; CPYR 2814. Collected 2002 in Armenia. Latitude 40° 50' 33" N. Longitude 44° 21' 45" E. Elevation 1517

m. Collected near village of Khachakap (formerly Saral) about 5 miles east of Spitak, Lori Marz region. Pedigree - Collected from the wild in Armenia. Spitaki 3 - Wild Caucasian pear; possibly introduced from Javaghck. Found in one of the homesteads of village Khachakap, in Lori Marz (Province). It is a tall tree (10 meters height), fertile; foliage is wide pyramid shape; branches are gray and thorny. Leaves are round, shiny from above, shaggy from the lower part; entire blade; petiloe is oblong; fruits are of apple shape, 3 to 4 cm diameter. Pulp is firm, sweetish. It has industrial usage. --collection notes sent by Samvel Gasparian on wild and cultivated fruits of Armenia, Ministry of Agriculture, Republic of Armenia, 2002.

PI 638007. Pyrus communis subsp. caucasica (Fed.) Browicz
Wild. Spitaki-4; Sample 36; CPYR 2815. Collected 2002 in Armenia. Latitude 40° 50' 33" N. Longitude 44° 21' 45" E. Elevation 1517 m. Collected near village of Khachakap (formerly Saral) about 5 miles east of Spitak, Lori Marz region. Pedigree - Collected from the wild in Armenia. Spitaki 4 - Wild Caucasian pear. Plant found in one of the homesteads of village Khachakap, in Lori Marz (Province). It is a tall tree (11 meters height); crown is wide pyramid shape with gray and thorny branches. Leaves are round, shaggy from the lower part, shining from the top; petiole is oblong; entire blade; fruits are comparably larger, 3 to 4 cm in diameter. Pulp is sweet with slight shade of sour taste; it is firm; good for industrial use. --collection notes sent by Samvel Gasparian o wild and cultivated fruits of Armenia, Ministry of Agriculture, Republic of Armenia, 2002.

PI 638008. Pyrus communis subsp. caucasica (Fed.) Browicz
Wild. P. salicifolia Sample 37; P. salicifolia; Sample 37; CPYR 2816. Collected 2002 in Armenia. Latitude 40° 50' 33" N. Longitude 44° 21' 45" E. Elevation 1517 m. Collected near village of Khachakap (formerly Saral) about 5 miles east of Spitak, Lori Marz region. Pedigree - Collected from the wild in Armenia. Uruterev tandz (= willow leaf shape pear) - wild. Tree is in the village of Khachakap in Lori Marz (Province). It is a tall tree (9 meters height); foliage is extended; branches are prickled with gray red color. Leaves are narrow, shaggy from the lower part with bunches (clusters); oblong (5 to 7 cm in length); entire blade; fruits are 1 to 3 cm in diameter with green yellowish color; leaf stalk is short; it has 3 to 5 pip caves. Pulp is firm. Fruit ripens in September - October; hardy to frosts and draughts. Uruterev tandz can easily grow in sandy soils; good for industrial use. --collection notes sent by Samvel Gasparian on wild and cultivated fruits of Armenia, Ministry of Agriculture, Republic of Armenia, 2002.

PI 638009. Pyrus elaeagrifolia Pall.
Wild. P. elaeagrifolia Sample 38; P. elaeagrifolia; Sample 38; CPYR 2817. Collected 2002 in Armenia. Latitude 40° 32' 19" N. Longitude 44° 42' 41" E. Elevation 1838 m. Collected near the village of Tsakhkadzor in the Kotayk Marz region. Pedigree - Collected from the wild in Armenia. Phsha(tav) terev tandzeni - Pyrus elaeagrifolia found in a homestead of town Tsaghkadzor in Kotayk Marz (Province). The tree is tall (8 meters height); crown is rounded; branches are gray and thorny. Leaves are counter ovate, looking like skin, shaggy from below. Fruits are 2 to 3 cm in diameter; green yellowish; edible when they pass a long time processing. Pulp is firm and has industrial usage. Fruits ripen in September-October; hardy to frosts and diseases. Collection notes sent by Samvel Gasparian on wild and

cultivated fruits of Armenia, Ministry of Agriculture, Republic of Armenia, 2002.

PI 638010. Pyrus communis L.
Wild. Sample 39; CPYR 2818; Dzmernuk OP. Collected in Armenia. Latitude 40° 10' 54" N. Longitude 44° 23' 57" E. Elevation 921 m. Collected near the village of Merdzavan in the Armavir Marz region. Pedigree - Open pollinated Dzmernuk. Dzmernuk (winter variety) - bought from the fruit gardens of Merdzavan village, in Armavir Marz (Province). It is a domestic variety cultivated by the local people. The tree grows very well. It can reach 5 to 6 and even more meters. Crown is of medium thickness, with slightly expressed pyramid shape; sometimes rounded; bark is plain and of light brown color. Shoots are dark brown and upright going. In fertile soils, the upper parts of the shoots with lush growth are bent. Buds are large an oblong. Leaves are large, round with flat surface; of dark green color and slightly serrate ends. Flowers are of medium size, white and fragrant; petals are of medium size. Fruits are of medium size, weighing 80 to 120 grams, round, comp cells. Fruit stalk is long; yellow greenish. Fennel is of average size; plate is not deep. Fruits are getting yellow when they are ripe enough. Seeds are flat, oblong with dark brown color. 100 dry seed weigh 6 to 7 grams. The tree bears late, 5 to 6 years after planting. Fruits ripen in late October. Collection notes sent by Samvel Gasparian on wild and cultivated fruits of Armenia, Ministry of Agriculture, Republic of Armenia, 2002. Another sample collected from same villago NPGS but not accessed was seed of western European cultivar 'Kjure' (= Cure or Vicar of Winkfield). It is not known if the 'Kjure' trees were growing near the 'Dzmernuk' trees, but this would be a possible pollen source for these open pollinated seeds. -- jp.

The following were donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 03/11/2003.

PI 638011. Pyrus pyrifolia (Burm. f.) Nakai
Cultivar. "Hamesi"; CPYR 2819. Ripe early August. Yellow skin, reliably productive, bears very sweet, juicy fruit, easily bruised in picking. Fruit tends to be small and needs careful thinning. -- G. Moulton and J. King. 2006. Fruit Handbook for Western Washington: Varieties and Culture.

PI 638012. Pyrus pyrifolia (Burm. f.) Nakai
Cultivar. CPYR 2820. Collected in Japan. Elevation 0 m. Choju. A very early season medium size Japanese pear. Origin: Kanagawa, Japan. A cross of Asahi x Kitsukawasei made at the Kanagawa Hort. Exp. Sta. in 1954; selected in 1969; named Choju (meaning 'long life') and released in 1973. The area around Ninomiya in Kanagawa Prefecture is a famous area for 'long life'. Fruit: v. early, med. size, russet skin; Flesh v. sweet, Tree: susc. to fireblight and pseudomonas. Resis. to black spot in Japan. One of the earliest ripening Asian pears available i the United States. Japanese people believe that eating early season ripening fruit promotes long life. Marketed as Ichiban Nashi (tm) by Fowler Nurseries. -- description from: I.Kajiura & Y.Sato. 1990. Recent progress in Japanese pear breeding and descriptions of cultivars based on literature review. Bulletin of the Fruit Tree Research Station (translated from Japanese by S. Wada).

PI 638013. Pyrus communis L.
Cultivar. "Bloodgood"; CPYR 2823. Pedigree - Unknown. Bloodgood has long been a standard summer pear in America. It surpasses any European associate of its season in both fruit- and tree-characters. In particular, the fruits are meritorious for flesh of fine texture, which, though a little granular, is melting and juicy, and has a rich, sweet, perfumed flavor. Complaints appear in the horticultural press that the quality is always poor if the fruit is not picked as soon as full grown and ripened indoors. The season in New York is August. The trees are resistant to blight, healthy, bear young and regularly, are long-lived, and attain large size, although in some situations they are but medium in size. The variety has little or no value in commercial plantations, but is prized in every collection for home use. The origin of this pear is unknown, but it is suposed to be a native of New York. It seems to have been brought to notice about 1835 by James Bloodgood of the nursery firm of Bloodgood and Company, Flushing, Long Islng to Robert Manning, the variety was listed in Princes Catalogue for 1837 as Early Beurre. After being introduced by Bloodgood and company, it was speedily recognized as one of the most valuable native sorts. The variety was placed upon the fruit catalog-list of the American Pomological Society in 1848. -- U.P. Hedrick, The Pears of New York, 1921. Scions for NCGR Corvallis were collected on 17 February, 2004, at the Bybee Howell Pioneer Orchard, Howell Territorial Park on Sauest of Portland, Oregon. This orchard was established by Larry L. McGraw and the Home Orchard Society in 1973 on the grounds of the restored James F. Bybee House to represent and preserve Pacific Northwest heirloom fruit varieties. -- J. Postman, 2005.

PI 638014. Pyrus communis L.
Cultivar. "Waverly"; CPYR 2824. Waverly was propagated by Larry McGraw from an old pear tree growing on the grounds of the Waverly Country Club near Milwaukie, Oregon. The land that is now the country club was originally the site of the Henderson Luelling Nursery, first nursery in the Pacific Northwest to grow grafted fruit trees. This tree was probably not one of the trees planted when the nursery was established in 1848, but was likely propagated from one of Luellings original trees. May be one of the European pear cultivars offered by Luelling. (Information from Wayne Hufstutter, Portland, Oregon, February 2004). Scions for NCGR Corvallis were collected on 17 February, 2004, at the Bybee Howell Pioneer Orchard, Howell Territorial Park on Sauvie Island land, Oregon. This orchard was established by Larry L. McGraw and the Home Orchard Society in 1973 on the grounds of the restored James F. Bybee House to represent and preserve Pacific Northwest heirloom fruit varieties. -- J. Postman, 2005.

PI 638015. Pyrus communis L.
Cultivar. "Whitman"; CPYR 2825. Whitman - Originally a very large, old tree located west of the Whitman Mission, Whitman College, Walla Walla, Washington. The tree was removed in the early 1970s to make way for a construction project at the college. The trunk of the tree was said to be about 16 feet in circumference at the time it was removed. Larry McGraw propagated the tree prior to imminent destruction and planted it at the Bybee Howell preservation orchard on Sauvie Island west of Portland, Oregon. (Information from Wayne Hufstutter, Portland, Oregon, February 2004). Scions for NCGR Corvallis were collected on 17 February, 2004, at the Bybee Howell Pioneer Orchard, Howell Territorial Park on Sauvie Island west of Portland, Oregon. This orchard was estLarry L. McGraw and the Home Orchard Society in 1973 on the grounds of the

restored James F. Bybee House to represent and preserve Pacific Northwest heirloom fruit varieties. -- J. Postman, 2005.

PI 638016. Pyrus communis L.
Cultivar. "Yaquina (Payson)"; "Yaquina"; CPYR 2826. Yaquina - Originally collected by Morris X. Smith (1910-1998) in the 1960s from a pear tree growing near the Yaquina River or Yaquina Bay upstream from Newport, Oregon. Adapted to the marine climate of the Oregon coast. Propagated by Larry L. McGraw for the Bybee Howell Pioneer Orchard, Howell Territorial Park on Sauvie Island west of Portland, Oregon. This orchard was established by McGraw and the Home Orchard Society in 1973 on the grounds of the restored James F. Bybee House to represent and preserve Pacific Northwest heirloom fruit varieties. The list of trees at Bybee Howell park has the name 'Payson' following 'Yaquina'. This may be the name of a person who owned the original tree? Scions for NCGR Corvallis were collected on 17 February, 2004, at the Bybee Howell Pioneer Orchard. -- J. Postman, 2005.

The following were donated by Delbert McCombs, 25758 Cherry Creek Rd., Monroe, Oregon 97456, United States. Received 02/27/2004.

PI 638017. Pyrus communis L.
Cultivar. "Shannon"; CPYR 2827. Shannon - This pear was grown for many years by Jake Tann, a farmer in the Albany/Tangent area of Linn County, Oregon. Mr. Tann sold fruit at several local farmer markets. The 'Shannon' pear was very popular and he had no trouble selling all that he could grow. It has been several years since Mr. Tann has offered fruit at the markets, and the Repository has been contacted on several occasions by individuals trying to locate sources of the 'Shannon' pear. Mr. Delbert McCombs obtained scionwood from Mr. Tann a number of years ago, and has been offering trees through his small nursery outside of Monroe, Oregon. He describes the pear as being late ripening, with a velvet smooth texture. -- J. Postman, 2004 The pear cultivar 'Gr' is a russeted sport of 'Gorham.' 'Grand Champion' originated in the W.F. Shannon orchard in Hood River, Oregon, in 1936. Perhaps 'Shannon' is a synonym for 'Grand Champion'? -- J. Postman, Feb. 2004.

The following were collected by John Wells, 2155 Wells Drive, Hood River, Oregon 97031, United States. Received 03/27/2004.

PI 638018. Pyrus betulifolia Bunge
Cultivated. Du Li; CPYR 2828. Collected 02/2004 in Shaanxi, China. Latitude 35° 35' N. Longitude 109° 15' E. Elevation 0 m. From the mountains of northwest Shaanxi in the wild pear forests of Huang Ling. Pedigree - Collected in the wild from Shaanxi Province, China. Collected in the wild pear forests of Huang Ling in Shaanxi Province, China. John Wells traveled to Shaanxi Province in February, 2004 and was given this seed by Mr. Xu Pu Gang at Xia-Ja Gou Village in Yangling County, the grower at Northwest Sci-Tech University of Agriculture and Forestry, Yangling Demonstration Farm. This is a cold-hardy form of P. betulifolia, from the northern limit of the natural range of this species. It is used as a rootstock for Asian pears and European pears in this part of China. Mr. Xu purchases the whole fruit with stem, and cleans and dries the seed in October, November and December. In January, approximately 50-60 days before soil temperatures increase, these dried

seeds are placed in sand stratification. In early March the seeds are planted at the density of 15 x 30 cm, at the rate of two kilograms of seed per one Mu (1/6 acre). As many as 20,000 seedling/Mu are produced but only the best, about 10,000/Mu are budded in September. It is said to produce a dwarf tree that is drought and waterlog resistant, and is of much interest to the pear industry of the pacific northwest United States as a potential dwarfing rootstock for cultivated pears. -- information from John Wells, 2 March, 2004.<P><edlot was collected from the same general region as PI 541007, received in 1989.

The following were collected by Morris X. Smith, 78 Chitwood, Toledo, Oregon 97391, United States. Developed by Wayne Huffstutter, 9525 S.W. 12th Drive, Portland, Oregon 97219, United States. Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 03/08/2004.

PI 638019. Pyrus communis L.
Cultivar. "X-Ceptional"; CPYR 2829. Collected 1985 in Oregon, United States. Scions received at USDA Repository in March, 2004 from Wayne Huffstetter, Portland, Oregon. X-Ceptional was a seedling pear discovered by Morris X. Smith on the grounds of the Bethel College, Polk County, Oregon, at the base of the Eola Hills. Scions were collected and propagated in 1985 by Mr. Huffstutter. Fruit was displayed at the Home Orchard Society fruit show in 1992 and was well accepted. Mr. Huffstutter named the pear in honor of Mr. Smith in 1995.

The following were collected by Samvel M. Gasparian, Scientific Research Center of Viticulture, Fruit Growing and Wine Making, Merdzavan, Armenia. Received 03/15/2004.

PI 638020. Pyrus communis subsp. caucasica (Fed.) Browicz
Wild. P. communis subsp. caucasica No.1; CPYR 2830. Collected 2003 in Armenia. Latitude 41° 7' 50" N. Longitude 44° 39' 7" E. Elevation 0 m. near town of Alaverdi, Tumanian region. Pedigree - Collected from the wild in Armenia. Pyrus caucasica seeds collected by Samvel Gasparian in Armenia and sent to J. Postman at NCGR-Corvallis. Wild form discovered in the neighborhood of town Alaverdi of Tumanian region, Lori Marz (Province). The height of tree is approximately 10 meters. Crown is wide and pyramid shaped. Leaves are not cut and are oval. Fruits are small (3 to 4 cm diameter) almost spherical. Fruit stem is long. Fruits become ripe in the first ten days of October. From collection notes sent by Gasparian.

PI 638021. Pyrus communis subsp. caucasica (Fed.) Browicz
Wild. P. communis subsp. caucasica No.2; CPYR 2831. Collected 2003 in Armenia. Latitude 39° 16' 3" N. Longitude 46° 23' 27" E. Elevation 0 m. Pedigree - Collected from the wild in Armenia. Pyrus caucasica seeds collected by Samvel Gasparian in Armenia and sent to J. Postman at NCGR-Corvallis. Wild form discovered in the territory of village Norashenik of Kapan region, Syunik Marz (Province). Height of tree is approximately 7 meters. Crown is broad and pyramid shaped. Leaves are oval shaped, in some cases roundish. Fruits are round and flat, yellowish, sparkling. Fruits are in bunches. Average length is 2.3 cm, average width is 3.0 cm. Fruits become ripe in the third ten days period of September. From collection notes sent by Gasparian.

PI 638022. Pyrus communis subsp. caucasica (Fed.) Browicz
Wild. P. communis subsp. caucasica No.3; CPYR 2832. Collected 2003 in Armenia. Latitude 40° 56' 19" N. Longitude 45° 10' 47" E. Elevation 0 m. Pedigree - Collected from the wild in Armenia. Pyrus caucasica seeds collected by Samvel Gasparian in Armenia and sent to J. Postman at NCGR-Corvallis. Wild form discovered in the territory of village Khashtarak of Tavush region, Idjevan Marz (Province). Height of tree is approximately 8 meters. Crown is broad and pyramid shaped. Leaves are of middle size and small, oblong-oval, fruit stems are long (about 7 cm). Fruits are in bunches, small, average length is 2 cm (1.9 to 2.2), average width is 2.4 cm (2.2 to 2.7), round, flat. Ripe fruits are yellow, sweet and with pleasant taste. Fruits become ripe in the second ten days period of September. From collection notes sent by Gasparian.

The following were donated by White Oak Nursery, 494 White Oak Road, Strasburg, Pennsylvania 17579, United States. Received 03/15/2004.

PI 638023. Pyrus communis L.
Cultivar. "Petre"; CPYR 2833. The original tree is growing in that interesting place, the old Bartram Botanic Garden, near Philadelphia. Col. Carr, the proprietor, who has disseminated this tree, informs us that in 1735, a seed was received by the elder John Bartram, from Lord Petre of London, as being the seed of a fine butter pear. The tree is not a rapid grower, but produces very regular and abundant crops. Young wood, slender, yellowish-brown. Fruit of medium size, or rather large, obovate. Skin very thin, pale yellow (sometimes marked with greenish-russet, and sprinlked with russet about the eye.) Calyx small, set in a narrow, but smooth basin. Flesh whitish, fine grained, buttery, and very melting; with a perfumed, slightly musky, high flavour. October, and if picked early, will keep a long time. -- A.J. Downing. 1859. Fruits and Fruit Trees of America, revised edition. I now have over 160 varieties growing in SE PA many which came from Geneva, a few from you and a number of other mid Atlantin my searching I got to know the folks at Historic Bartrams Gardens and found out that there was a rapidly disappearing pear named Lady Peter or Lady Petrie. There were two trees left in the world-one in nearby Germantown and one near DC in Chevy Chase. I contacted the owners in Germantown, got some scions and had no luck probably because of the age of the parent tree. The owners told me of someone else's efforts some ~15 years earlier that resulted in the one tree in Chevy Chaing/early summer my family and I were driving thru DC and stopped, and these owners were nice enough to allow us to take cuttings. I'm happy to report that there are now ~25 nice trees growing in SE PA which will be available for dispersal this fall or next spring. I have contacted my friends at Bartrams and expect that they will want several... -- Mike Tomlinson, Source of NCGR Scions, from a June, 2003 email.

The following were developed by University of Minnesota, Horticultural Research Ctr., 600 Arboretum Blvd., Excelsior, Minnesota 55331, United States. Donated by J. Reich, Cornell University, NY Agric. Exper. Sta., Geneva, New York, United States. Received 11/18/1986.

PI 638024. Ribes uva-crispa L.
Cultivar. "Welcome"; CRIB 256. Pedigree - Open pollinated seedling selection of cv Poorman. Fruit: medium-large, skin light, dull red,

glabrous, flesh pink, flavor tart, quality good, seeds few, wmall ripens before Pixwell and Como.
Plant: spines sparse, short, weak, missing on older wood, vigorous, productive, relatively free of d, particularly anthracnose.
Brooks and Olmo, 1972.

The following were collected by Catherine I. Wright, Alaska Plant Materials Center, HCO2, Box 7440, Palmer, Alaska 99645, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/08/1996.

PI 638025. Ribes glandulosum Grauer
Wild. KHCW 96-24-02; CRIB 1097. Collected 08/04/1996 in Alaska, United States. Latitude 60° 25' N. Longitude 151° 5' W. Elevation 25 m. Kalifonski Beach Road, pull-off to west side open parking lot edge looking out to Cook Inlet cliff edge down to beach. Open edge of gravel roadside pull-off, mostly direct sun. Pedigree - collected from the wild in Alaska. USDA Sponsored plant collecting expedition, 1996.

The following were donated by E.F. Mashburn, The International Ribes Association, 707 Front Street, Northumberland, Pennsylvania 17857, United States. Received 08/26/1997.

PI 638026. Ribes aureum Pursh **var. aureum**
Cultivar. "Pallagi 1"; CRIB 1142. Developed in Hungary. Pedigree - Hungarian selection of the American species R. aureum. This cultivar is used as a rootstock for gooseberry or currant propagation. Gooseberry or currant "trees" that are 1.5 to 2 m tall are used for production acreages in Europe. This selection was made in Hungary.

The following were collected by Brian Geils, U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Southwest Forest Science Complex, Flagstaff, Arizona 86001, United States. Donated by Brian Geils, U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Southwest Forest Science Complex, Flagstaff, Arizona 86001, United States; James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/05/1998.

PI 638027. Ribes mescalerium Coville
Wild. BG-04; CRIB 1160. Collected 08/19/1998 in New Mexico, United States. Elevation 2623 m. Near James Ridge Lookout 8613 ft elevation. 3 chains (about 200 feet) northwest of junction FR 175 and FR 5583. Otero County, New Mexico. Pedigree - Collected from the wild in New Mexico.

The following were donated by E.F. Mashburn, The International Ribes Association, 707 Front Street, Northumberland, Pennsylvania 17857, United States. Received 11/17/1998.

PI 638028. Ribes nigrum L.
Cultivar. CRIB 1163. Pedigree - selection of R. nigrum with green fruit.

The following were donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 12/18/1998.

PI 638029. Ribes nigrum L.
Cultivar. "Hietala"; CRIB 1180; Q 30862. Developed in Russian Federation. Pedigree - Scandinavian black currant selected from the wild in Finland.

The following were collected by Richard A. Moyer, King College, 1350 King College Rd., Bristol, Tennessee 37620, United States. Received 08/19/1999.

PI 638030. Ribes sp.
Wild. R. sp.; CRIB 1193. Collected 08/15/1999 in Virginia, United States. Latitude 36° 47' 26" N. Longitude 81° 46' 20" W. Elevation 520 m. Virginia Creeper Trail, at the confluence of Middle Fork Holston River and South Fork Holston River. Washington county, Virginia. In cracks, ledges and base of Limstone railroad cut in rich woods in heavy shade. Pedigree - Collected from the wild in Virginia.

The following were collected by Maximilian Weigend, Institut fur Biologie, Systematische Botanik und Pflanzengeographie der, Freien Universitat Berlin, Berlin, Germany. Received 04/07/2000.

PI 638031. Ribes sp.
Wild. W&W 2000/295; R. incarnatum W&W 2000/295; CRIB 1220. Collected 02/14/2000 in Apurimac, Peru. Pedigree - Collected from the wild in Apurimac, Peru.

The following were donated by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 10/14/2000.

PI 638032. Ribes sp.
Wild. CRIB 1227. Pedigree - Collected from the wild in Kazakhstan.

The following were donated by Dick McGinnis, McGinnis Berry Crops LTD., 3583 Dove Creek Road, Courtenay, British Columbia V9J 1P3, Canada. Received 04/25/2001.

PI 638033. Ribes hybrid
Cultivar. CRIB 1236. Pedigree - Worchesterberry x Champagne Red. Black Velvet is immune to mildew and shows no signs of White Pine Blister Rust. It is a derivative of Worchesterberry and Champagne Red. It has a vigous growth habit and takes serveral seasons to begin cropping. The fruit is smaller than Hinnomaki Red but still large enough to be attractive for home garden use. It has an unusual but interesting flavor.

The following were collected by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 03/2000.

PI 638034. Ribes bracteosum Douglas
Wild. CRIB 1237. Collected 03/2000 in Oregon, United States. Pedigree - Collected from the wild in Oregon.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Nick Vorsa, Rutgers University, Blueberry & Cranberry, Research Station, Chatsworth, New Jersey 08109, United States; Pavel Cherbukin, Vavilov Research Institute, Far Eastern Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation; Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/31/2001.

PI 638035. Ribes hybrid
Cultivar. HVSC-019; "Ussurie OP"; CRIB 1239. Collected 08/10/2001 in Primorye, Russian Federation. Pedigree - Ribes pacdiflorum x Ribes nigrum OP. Ussurie is very resistant to disease and large fruited.

PI 638036. Ribes pauciflorum Turcz. ex Pojark.
Wild. HVSC-021; CRIB 1240. Collected 08/10/2001 in Primorye, Russian Federation. Latitude 44° 40' 36" N. Longitude 135° 35' 10" E. Elevation 2460 m. Near Dalnegorsk. Pedigree - Collected from the wild in Primorye, Russian Federation.

PI 638037. Ribes pauciflorum Turcz. ex Pojark.
Wild. HVSC-022; CRIB 1241. Collected 08/10/2001 in Primorye, Russian Federation. Pedigree - Collected from the wild in Primorye, Russian Federation.

PI 638038. Ribes fontaneum Bochkarn.
Wild. HVSC-040; CRIB 1243. Collected 08/12/2001 in Primorye, Russian Federation. Pedigree - Collected from the wild in Primorye, Russian Federation.

PI 638039. Ribes maximowiczianum Kom.
Wild. HVSC-063; CRIB 1244. Collected 08/15/2001 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638040. Ribes diacanthum Pall.
Wild. HVSC-064; CRIB 1245. Collected 08/15/2001 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638041. Ribes pauciflorum Turcz. ex Pojark.
Wild. HVSC-070; CRIB 1246. Collected 08/16/2001 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638042. Ribes pallidiflorum Pojark.
Wild. HVSC-077; CRIB 1248. Collected 08/17/2001 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638043. Ribes fontaneum Bochkarn.
Wild. HVSC-078; CRIB 1249. Collected 08/17/2001 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638044. Ribes fontaneum Bochkarn.
Wild. HVSC-081; CRIB 1250. Collected 08/17/2001 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638045. Ribes pallidiflorum Pojark.
Wild. HVSC-082; CRIB 1251. Collected 08/17/2001 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638046. Ribes triste Pall.
Wild. HVSC-083; CRIB 1252. Collected 08/17/2001 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638047. Ribes palczewskii (Jancz.) Pojark.
Wild. HVSC-086; CRIB 1253. Collected 08/17/2001 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638048. Ribes palczewskii (Jancz.) Pojark.
Wild. HVSC-098; CRIB 1254. Collected 08/19/2001 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638049. Ribes fontaneum Bochkarn.
Wild. HVSC-100; CRIB 1256. Collected 08/19/2001 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638050. Ribes fontaneum Bochkarn.
Wild. HVSC-101; CRIB 1257. Collected 08/20/2001 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638051. Ribes fontaneum Bochkarn.
Wild. HVSC-105; CRIB 1258. Collected 08/21/2001 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638052. Ribes fontaneum Bochkarn.
Wild. HVSC-106; CRIB 1259. Collected 08/21/2001 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638053. Ribes dikuscha Fisch. ex Turcz.
Wild. HVSC-110; CRIB 1260. Collected 08/14/2001 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638054. Ribes pallidiflorum Pojark.
Wild. HVSC-111; CRIB 1261. Collected 08/14/2001 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

The following were collected by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 03/2000.

PI 638055. Ribes pauciflorum Turcz. ex Pojark.
Wild. CRIB 1262; R. pauciflorum. Collected 2000 in Primorye, Russian Federation. Pedigree - Collected from the wild near Vladivostok, Primorye, Russian Federation.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, U.S. Peace Corps, Cuerpo de Paz, Casilla #749, Sucre, Chuquisaca, Bolivia; Isabella Arevshatyan, Yerevan, Armenia; Mariam Emyan, USDA, Marketing Assistance Program, Armenia; Eleonora Gabrielian, Department of Plant Systemics, Geography National Academie of Sciences, Institute of Botany, Yerevan, Armenia; Samvel M. Gasparian, Scientific Research Center of Viticulture, Fruit Growing and Wine Making, Merdzavan, Armenia; Vrez Manakyan, Armenia Academie of Science, Institute of Botany, Yerevan, Armenia; Ashot A. Charchoglian, National Academie of Sciences, Institute of Botany, Yerevan, Armenia. Donated by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 06/27/2002.

PI 638056. Ribes sp.
Cultivated. CRIB 1269. Collected 08/11/2001 in Armenia. Pedigree - Collected from a garden in Yerevan, Armenia.

PI 638057. Ribes sp.
Cultivated. CRIB 1270. Collected 08/11/2001 in Armenia. Pedigree - Collected from a garden in Yerevan, Armenia.

The following were collected by Paul Meyer, The University of Pennsylvania, Morris Arboretum, 9414 Meadowlark Avenue, Philadelphia, Pennsylvania 19118, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Gagik Movsisyan, Armenia; Alan Whittemore, U.S. National Arboretum, USDA, ARS, 3501 New York Avenue, NE, Washington, District of Columbia 20002-1958, United States; Ashot A. Charchoglian, National Academie of Sciences, Institute of Botany, Yerevan, Armenia; Pavel Humbaryan, Armenia Institute of Botany, Yerevan, Armenia; Yura Paityan, Armenia Institute of Botany, Yerevan, Armenia. Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/11/2002.

PI 638058. Ribes armenum Pojark.
Wild. CRIB 1274. Collected 09/06/2002 in Armenia. Latitude 40° 36' 25" N. Longitude 44° 32' 43" E. Elevation 2165 m. Hankavan Valley in Kotayk Marz provinces. Forest edge with Quercus macranthera, Betula litwinovii, Ulmus sp. Pedigree - Collected from the wild in Armenia.

PI 638059. Ribes petraeum var. biebersteinii (Berland.) C. K. Schneid. Wild. CRIB 1276. Collected 09/08/2002 in Armenia. Latitude 40° 22' 17" N. Longitude 45° 35' 44" E. Elevation 2293 m. Daranak Valley in Gegharkunik Marz provinces. Dry, rocky pasture with other Juniperus spp. Pedigree - Collected from the wild in Armenia.

Unknown source. Received 04/05/2002.

PI 638060. Ribes dikuscha Fisch. ex Turcz. Wild. CRIB 1277. Collected in Khabarovsk, Russian Federation. Pedigree - Collected from the wild on Amgun River, Khabarovsk.

Unknown source. Received 04/05/2002.

PI 638061. Ribes dikuscha Fisch. ex Turcz. Wild. CRIB 1278. Collected in Khabarovsk, Russian Federation. Pedigree - Collected from the wild on Amgun River, Khabarovsk.

Unknown source. Received 04/05/2002.

PI 638062. Ribes dikuscha Fisch. ex Turcz. Wild. CRIB 1279. Collected in Khabarovsk, Russian Federation. Pedigree - Collected from the wild on Amgun River, Khabarovsk.

Unknown source. Received 04/05/2002.

PI 638063. Ribes dikuscha Fisch. ex Turcz. Wild. CRIB 1280. Collected in Khabarovsk, Russian Federation. Pedigree - Collected from the wild on Amgun River, Khabarovsk.

Unknown source. Received 04/05/2002.

PI 638064. Ribes dikuscha Fisch. ex Turcz. Wild. CRIB 1281. Collected in Khabarovsk, Russian Federation. Pedigree - Collected from the wild on Amgun River, Khabarovsk.

Unknown source. Received 04/05/2002.

PI 638065. Ribes dikuscha Fisch. ex Turcz. Wild. CRIB 1282. Collected in Primorye, Russian Federation. Pedigree - Open pollinated sample from FEES, Vladivostok Russia.

Unknown source. Received 04/05/2002.

PI 638066. Ribes dikuscha Fisch. ex Turcz. Wild. CRIB 1283. Collected in Primorye, Russian Federation. Pedigree - Open pollinated sample from FEES, Vladivostok Russia.

Unknown source. Received 04/05/2002.

PI 638067. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1284. Collected in Primorye, Russian Federation. Pedigree - Open pollinated sample from FEES, Vladivostok Russia.

Unknown source. Received 04/05/2002.

PI 638068. Ribes pauciflorum Turcz. ex Pojark.
Wild. CRIB 1285. Collected in Primorye, Russian Federation. Pedigree - Open pollinated sample from FEES, Vladivostok Russia.

Unknown source. Received 04/05/2002.

PI 638069. Ribes pallidiflorum Pojark.
Wild. CRIB 1286. Collected in Primorye, Russian Federation. Pedigree - Open pollinated sample from FEES, Vladivostok Russia.

Unknown source. Received 04/05/2002.

PI 638070. Ribes palczewskii (Jancz.) Pojark.
Wild. CRIB 1287. Collected in Khabarovsk, Russian Federation. Pedigree - Collected from the wild on Amgun River, Khabarovsk.

Unknown source. Received 04/05/2002.

PI 638071. Ribes palczewskii (Jancz.) Pojark.
Wild. CRIB 1288. Collected in Primorye, Russian Federation. Pedigree - Open pollinated sample from FEES, Vladivostok Russia.

Unknown source. Received 04/05/2002.

PI 638072. Ribes nigrum L.
Wild. CRIB 1289. Collected in Khakassia, Russian Federation. Elevation 0 m. Abakan River. Pedigree - Collected from the wild in Khakassia, Russian Federation.

The following were collected by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 10/29/2002.

PI 638073. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1290. Collected 08/2002 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638074. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1291. Collected 08/2002 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638075. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1292. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638076. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1293. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638077. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1294. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638078. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1295. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638079. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1296. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638080. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1297. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638081. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1298. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638082. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1299. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638083. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1300. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638084. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1301. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638085. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1302. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638086. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1303. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638087. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1304. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638088. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1305. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638089. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1306. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638090. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1307. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Amur, Russian Federation.

PI 638091. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1308. Collected 08/2002 in Amur, Russian Federation.
Pedigree - Collected from the wild in Amur, Russian Federation.

PI 638092. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1309. Collected 08/2002 in Amur, Russian Federation.
Pedigree - Collected from the wild in Amur, Russian Federation.

PI 638093. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1310. Collected 08/2002 in Amur, Russian Federation.
Pedigree - Collected from the wild in Amur, Russian Federation.

PI 638094. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1311. Collected 08/2002 in Amur, Russian Federation.
Pedigree - Collected from the wild in Amur, Russian Federation.

PI 638095. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1312. Collected 08/2002 in Amur, Russian Federation.
Pedigree - Collected from the wild in Amur, Russian Federation.

PI 638096. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1313. Collected 08/2002 in Amur, Russian Federation.
Pedigree - Collected from the wild in Amur, Russian Federation.

PI 638097. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1314. Collected 08/2002 in Amur, Russian Federation.
Pedigree - Collected from the wild in Amur, Russian Federation.

PI 638098. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1315. Collected 08/2002 in Amur, Russian Federation.
Pedigree - Collected from the wild in Amur, Russian Federation.

PI 638099. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1316. Collected 08/2002 in Amur, Russian Federation.
Pedigree - Collected from the wild in Amur, Russian Federation.

PI 638100. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1317. Collected 08/2002 in Amur, Russian Federation.
Pedigree - Collected from the wild in Amur, Russian Federation.

PI 638101. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1318. Collected 08/2002 in Amur, Russian Federation.
Pedigree - Collected from the wild in Amur, Russian Federation.

PI 638102. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1319. Collected 08/2002 in Amur, Russian Federation.
Pedigree - Collected from the wild in Amur, Russian Federation.

PI 638103. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1320. Collected 08/2002 in Amur, Russian Federation.
Pedigree - Collected from the wild in Amur, Russian Federation.

PI 638104. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1321. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638105. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1322. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638106. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1323. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638107. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1324. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638108. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1325. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638109. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1326. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638110. Ribes palczewskii (Jancz.) Pojark.
Wild. CRIB 1327. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638111. Ribes palczewskii (Jancz.) Pojark.
Wild. CRIB 1328. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638112. Ribes palczewskii (Jancz.) Pojark.
Wild. CRIB 1329. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638113. Ribes palczewskii (Jancz.) Pojark.
Wild. CRIB 1330. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

PI 638114. Ribes palczewskii (Jancz.) Pojark.
Wild. CRIB 1331. Collected 08/2002 in Amur, Russian Federation.
Pedigree - Collected from the wild in Amur, Russian Federation.

PI 638115. Ribes palczewskii (Jancz.) Pojark.
Wild. CRIB 1332. Collected 08/2002 in Amur, Russian Federation.
Pedigree - Collected from the wild in Amur, Russian Federation.

PI 638116. Ribes pallidiflorum Pojark.
Wild. CRIB 1333. Collected 08/2002 in Khabarovsk, Russian Federation.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

The following were donated by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 10/29/2002.

PI 638117. Ribes pauciflorum Turcz. ex Pojark.
Wild. CRIB 1334. Collected 08/2002 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

Unknown source. Received 10/29/2002.

PI 638118. Ribes mandshuricum (Maxim.) Kom.
Wild. CRIB 1335. Collected in Shanxi, China. Pedigree - Collected from the wild in Shanxi, China.

Unknown source. Received 10/29/2002.

PI 638119. Ribes nigrum L.
Cultivar. "Lira"; CRIB 1336. Collected in Primorye, Russian Federation. Pedigree - complex hybrid [I61/39 siberian x Altai Desertnaya + Nina Zhaleinaya Altaiskaya + 67-37-I R. nigrum].

Unknown source. Received 10/29/2002.

PI 638120. Ribes nigrum L.
Cultivar. "Primorsky Chempion"; CRIB 1337. Pedigree - [Liya Plodorodnaya x Aldansky Vinograd (R. dikuscha)].

Unknown source. Received 10/29/2002.

PI 638121. Ribes nigrum L.
Cultivar. "Primorsky Velikan"; CRIB 1338. Pedigree - complex hybrid [Likernaya x Altaiskaya Desertnaya + Nina + Zhadileinaya Altaiskaya + 67-37-I (R. nigrum)].

Unknown source. Received 10/29/2002.

PI 638122. Ribes nigrum L.
Cultivar. "Rodnik"; CRIB 1339. Collected in Altay, Russian Federation. Pedigree - Altaiskaya Desertnaya x Golubka.

Unknown source. Received 10/29/2002.

PI 638123. Ribes nigrum L.
Cultivar. "Slokhnokistnaya"; CRIB 1340. Pedigree - (Krbkhovnichnaya x Grananaya) x Primorsky Champion open pol.

Unknown source. Received 10/29/2002.

PI 638124. Ribes nigrum L.
Cultivar. "Ussuri"; CRIB 1341. Pedigree - selection of R. fontanaeum and R. nigrum.

Unknown source. Received 10/29/2002.

PI 638125. Ribes nigrum L.
Cultivar. "Veloy"; Veloi; CRIB 1342. Pedigree - Leningrad Giant x Ojebyn.

Unknown source. Received 04/05/2002.

PI 638126. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1343. Collected in Khabarovsk, Russian Federation. Pedigree - Collected from the wild on the Amgun River, Khabarovsk.

Unknown source. Received 04/05/2002.

PI 638127. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1344. Collected in Khabarovsk, Russian Federation. Pedigree - Collected from the wild on the Amgun River, Khabarovsk.

Unknown source. Received 04/05/2002.

PI 638128. Ribes dikuscha Fisch. ex Turcz.
Wild. CRIB 1345. Collected in Khabarovsk, Russian Federation. Pedigree - Collected from the wild on the Amgun River, Khabarovsk.

Unknown source. Received 12/31/2002.

PI 638129. Ribes rubrum L.
Wild. CRIB 1346. Collected in Sweden. Pedigree - Collected from Umea, Sweden.

The following were collected by Douglas Cook, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Jodi Smith-Jackson, USDA, ARS, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Jodi Jackson, USDA/ARS/NCGR, 33447 Peoria Road, Corvalis, Oregon 97333-2521, United States. Donated by James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/20/2002.

PI 638130. Ribes aureum Pursh **var. aureum**
Wild. OCJ-20; R. aureum OCJ 20; CRIB 1347. Collected 09/13/2002 in Colorado, United States. Latitude 39° 52' 56" N. Longitude 107° 46' 4" W. Elevation 2319 m. East Fork of Miller Creek on County Road 57 east of Meeker, south of County Road 8. Rio Blanco County White River Watershed. Raparian; associated flora: Salix, Humulus, Prunus. Pedigree - Collected from the wild in Colorado.

PI 638131. Ribes sp.
Wild. OCJ-32; Shrine Pass; CRIB 1348. Collected 09/14/2002 in Colorado, United States. Latitude 39° 32' 24" N. Longitude 106° 13' 59" W. Elevation 3610 m. Southeast of Vail on I-70 to Vail Pass, west on Shrine Pass Road to summit. West 20 m downhill from Parking area toward West Tenmile Creek, at base spruce tree. South Platt River Watershed. Alpine. Slope 20 degrees, aspect west. Pedigree - Collected from the wild in Colorado.

The following were collected by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 09/30/2001.

PI 638132. Ribes sachalinense (F. Schmidt) Nakai
Wild. CRIB 1349. Collected 2001 in Sakhalin, Russian Federation. Latitude 47° 30' N. Longitude 142° 30' E. Elevation 0 m. Yasnoe. Pedigree - Collected from the wild on Sakhalin, Russian Federation.

Unknown source. Received 02/14/2003.

PI 638133. Ribes palczewskii (Jancz.) Pojark.
Wild. CRIB 1351. Collected in Russian Federation.

Unknown source. Received 02/14/2003.

PI 638134. Ribes palczewskii (Jancz.) Pojark.
Wild. CRIB 1352. Collected in Russian Federation. Pedigree - Collected from the wild in Amur, Russian Federation.

The following were donated by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 02/14/2003.

PI 638135. Ribes burejense F. Schmidt
Wild. CRIB 1353. Collected in Russian Federation. Elevation 0 m. Bureya River. Pedigree - Collected from the wild in Amur, Russian Federation.

Unknown source. Received 02/14/2003.

PI 638136. Ribes mandshuricum (Maxim.) Kom.
Wild. CRIB 1355. Collected in Primorye, Russian Federation. Pedigree - Collected from the wild in Primorye, Russian Federation.

Unknown source. Received 02/14/2003.

PI 638137. Ribes mandshuricum (Maxim.) Kom.
Wild. CRIB 1356. Collected in Primorye, Russian Federation. Pedigree - Collected from the wild in Primorye, Russian Federation.

The following were collected by Bruce Bartlett, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/03/2002.

PI 638138. Ribes bracteosum Douglas
Wild. CRIB 1357. Collected 08/31/2002 in Washington, United States. Pedigree - Collected from the wild in Washington.

The following were donated by Dan L. Barney, University of Idaho, Research and Extension Center, 2105 N. Boyer, Sandpoint, Idaho 83864-9454, United States. Received 10/19/2001.

PI 638139. Ribes aureum var. villosum DC.
Cultivar. CRIB 1358; Crandall open pollinated. Pedigree - Open pollinated seeds of Crandall. The seeds came from two open-pollinated 'Crandall' bushes located at the University of Idaho, Sandpoint Research And Extension Center. The plants were originally provided by the USDA-ARS-NCGR-Corvallis and are growing in a cultvated block with mature red, white and black currants,gooseberries, and jostaberries. I know of no other wild or cultivated Ribes odoratum (Ribes aureum var. villosum) in the area. Dan Barney October 2001.

The following were collected by James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Jodi Smith-Jackson, USDA, ARS, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Donated by James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/22/2003.

PI 638140. Ribes pinetorum Greene
Wild. OJ-2003-08; CRIB 1359. Collected 09/15/2003 in Arizona, United States. Pedigree - Collected from the wild in Arizona.

The following were donated by Harry Jan Swartz, University of Maryland, Dept. Horticulture, Holzaphel Hall, College Park, Maryland 20742, United States. Received 11/12/2003.

PI 638141. Ribes nigrum L.
Cultivar. CRIB 1368.

PI 638142. Ribes nigrum L.
Cultivar. CRIB 1369.

PI 638143. Ribes nigrum L.
Cultivar. CRIB 1370.

PI 638144. Ribes nigrum L.
Cultivar. CRIB 1371.

PI 638145. Ribes nigrum L.
Cultivar. CRIB 1372.

PI 638146. Ribes nigrum L.
Cultivar. CRIB 1373.

PI 638147. Ribes nigrum L.
Cultivar. CRIB 1374.

PI 638148. Ribes nigrum L.
Cultivar. CRIB 1375.

The following were collected by Pavel Cherbukin, Vavilov Research Institute, Far Eastern Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation; Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation; Luda Popova, Vavilov Research Institute, Far Eastern Experiment Station, Vavilov Road, House #9, Vladivostok, Primorye 690025, Russian Federation. Donated by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 01/29/2004.

PI 638149. Ribes latifolium Jancz.
Wild. AS-03-011; CRIB 1376. Collected 09/07/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638150. Ribes latifolium Jancz.
Wild. AS-03-012; CRIB 1377. Collected 09/02/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638151. Ribes latifolium Jancz.
Wild. AS-03-012A; CRIB 1378. Collected 08/21/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638152. Ribes latifolium Jancz.
Wild. AS-03-013; CRIB 1379. Collected 08/19/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638153. Ribes latifolium Jancz.
Wild. AS-03-014; CRIB 1380. Collected 08/19/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638154. Ribes latifolium Jancz.
Wild. AS-03-015; CRIB 1381. Collected 08/18/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638155. Ribes latifolium Jancz.
Wild. AS-03-016; CRIB 1382. Collected 09/04/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638156. Ribes latifolium Jancz.
Wild. AS-03-017; CRIB 1383. Collected 09/05/2003 in Sakhalin, Russian

Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638157. Ribes latifolium Jancz.
Wild. AS-03-018; CRIB 1384. Collected 08/17/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638158. Ribes latifolium Jancz.
Wild. AS-03-019; CRIB 1385. Collected 08/16/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638159. Ribes procumbens Pall.
Wild. AS-03-020; CRIB 1386. Collected 08/26/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638160. Ribes procumbens Pall.
Wild. AS-03-021; CRIB 1387. Collected 08/22/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638161. Ribes procumbens Pall.
Wild. AS-03-022; CRIB 1388. Collected 08/21/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638162. Ribes procumbens Pall.
Wild. AS-03-023; CRIB 1389. Collected 08/20/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638163. Ribes sachalinense (F. Schmidt) Nakai
Wild. AS-03-024; CRIB 1390. Collected 07/27/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638164. Ribes sachalinense (F. Schmidt) Nakai
Wild. AS-03-025; CRIB 1391. Collected 08/18/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638165. Ribes sachalinense (F. Schmidt) Nakai
Wild. AS-03-026; CRIB 1392. Collected 08/19/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638166. Ribes sachalinense (F. Schmidt) Nakai
Wild. AS-03-027; CRIB 1393. Collected 09/02/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638167. Ribes sachalinense (F. Schmidt) Nakai
Wild. AS-03-028; CRIB 1394. Collected 08/23/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638168. Ribes sachalinense (F. Schmidt) Nakai
Wild. AS-03-029; CRIB 1395. Collected 09/01/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638169. Ribes sachalinense (F. Schmidt) Nakai
Wild. AS-03-030; CRIB 1396. Collected 09/02/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638170. Ribes triste Pall.
Wild. AS-03-031; CRIB 1397. Collected 08/20/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638171. Ribes triste Pall.
Wild. AS-03-032; CRIB 1398. Collected 08/22/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan; Takao Sato, Hokkaido Forestry Research Institute, General Research and Information Center, Koshunai, Bibai, Hokkaido 0079-0918, Japan. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 638172. Ribes japonicum Maxim.
Wild. R. japonicum J06; HD-2004-06; CRIB 1400. Collected 07/09/2004 in Hokkaido, Japan. Latitude 43° 17' 24" N. Longitude 141° 51' 15" E. Elevation 33 m. In Bibai, at the Hokkaido Forestry Research Institute. Pedigree - Collected from the wild in Hokkaido, Japan. Hokkaido Forestry Research Institute and Greenery Research and Information Center is a state run facility by the Prefecture of Hokkaido. Native woody plants of Hokkaido are studied at this center. Dr. Takao Sato is a senior research scientist at this center and has written a book on 'Trees and Shrubs of Hokkaido'. Dr. Sato guided us through the collections at the HFRI. This accession was collected from cultivated plants of originally wild collected species growing in the experimental gardens. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultura Service, USA, prepared in May 2004. Fruits on long strigs, as many as 15 to 20 fruit per strig. Most of the fruits were green when collected. Some were just beginning to turn black. The HFRI had Pinus strobus nearpportunity for white pine blister rust to develop on susceptible plants. This species is highly susceptible to this disease. The Ribes leaves were covered with uredinia on the abaxial surfaces.

PI 638173. Ribes latifolium Jancz.
Wild. R. latifolium J07; HD-2004-07; CRIB 1401. Collected 07/09/2004 in Hokkaido, Japan. Latitude 43° 17' 24" N. Longitude 141° 51' 15" E. Elevation 33 m. In Bibai, at the Hokkaido Forestry Research Institute. Pedigree - Collected from the wild in Hokkaido, Japan. Hokkaido Forestry Research Institute and Greenery Research and Information Center is a state run facility by the Prefecture of Hokkaido. Native woody plants of Hokkaido are studied at this center. Dr. Takao Sato is a senior research scientist at this center and has written a book on 'Trees and Shrubs of Hokkaido'. Dr. Sato guided us through the collections at the HFRI. This accession was collected from cultivated plants of originally wild collected species growing in the experimental gardens. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultura Service, USA, prepared in May 2004.

PI 638174. Ribes triste Pall.
Wild. R. triste J08; HD-2004-08; CRIB 1402. Collected 07/09/2004 in Hokkaido, Japan. Latitude 43° 17' 24" N. Longitude 141° 51' 15" E. Elevation 33 m. In Bibai, at the Hokkaido Forestry Research Institute. Pedigree - Collected from the wild in Hokkaido, Japan. Hokkaido Forestry Research Institute and Greenery Research and Information Center is a state run facility by the Prefecture of Hokkaido. Native woody plants of Hokkaido are studied at this center. Dr. Takao Sato is a senior research scientist at this center and has written a book on 'Trees and Shrubs of Hokkaido'. Dr. Sato guided us through the collections at the HFRI. This accession was collected from cultivated plants of originally wild collected species growing in the experimental gardens. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Research Service, USA, prepared in May 2004.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 638175. Ribes sachalinense (F. Schmidt) Nakai
Wild. R. sachalinensis J79; HD-2004-79; CRIB 1405. Collected 07/20/2004 in Hokkaido, Japan. Latitude 43° 12' 6" N. Longitude 145° 31' 24" E. Elevation 45 m. Ochi-ichi forest, near stream. Riparian habitat in dark forest with dense undergrowth. Moist locality, soil -organic duff. Associated species: growing under Abes sachalinensis, with big leaf, Vitis and Artemesia. Pedigree - Collected from the wild in Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004. Fruit had glandular hairs on them and were sticky to the touch.

PI 638176. Ribes sachalinense (F. Schmidt) Nakai
Wild. R. sachalinensis J80; HD-2004-80; CRIB 1406. Collected 07/21/2004 in Hokkaido, Japan. Latitude 42° 58' 6" N. Longitude 144° 43' 36" E. Elevation 53 m. Akkeshi-wan peninsula. Under Abies forest, on darker side of forest, associated with Abes sachalinensis, big leaf, Vitis and Artemesia. Pedigree - Collected from the wild in Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638177. Ribes triste Pall.
Wild. R. triste J85; HD-2004-85; CRIB 1407. Collected 07/21/2004 in Hokkaido, Japan. Latitude 42° 48' 14" N. Longitude 143° 10' 13" E. Elevation 61 m. Obihiro-Shi forest next to Satsunai River, southeast of town center. Growing in dark woods in swampy area. Associated species: Abies, Alnus, Juglans, Trillium and Syringa reticulata. Pedigree - Collected from the wild in Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638178. Ribes japonicum Maxim.
Wild. R. japonicum J96; HD-2004-96; CRIB 1412. Collected 07/23/2004 in Hokkaido, Japan. Latitude 42° 9' 34" N. Longitude 143° 2' 28" E. Elevation 179 m. Near Mt. Apoi, section 91, Toyukinazawa valley, at place where two edges of rocks meet so that water drains down at bends in the road. Associated species: under Betula, mullberry, fern, big leaf and bamboo. Pedigree - Collected from the wild in Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

The following were collected by James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/07/2004.

PI 638179. Ribes nevadense Kellogg
Wild. R. navadense; CRIB 1413. Collected 08/23/2004 in California, United States. Pedigree - Collected from the wild in California.

The following were collected by Douglas Cook, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/14/2000.

PI 638180. Ribes sp.
Wild. DC2000-1; R. sp. DC2000-1; CRIB 1414. Collected 08/11/2000 in Oregon, United States. Latitude 43° 42' 45" N. Longitude 121° 16' 53" W. Elevation 1939 m. Next to trail along Paulina Creek, near Paulina Cr. Falls. Newberry National Volcanic Monument. Pedigree - Collected from the wild in Oregon.

The following were developed by Arvo Kallio, USDA, ARS, University of Alaska, Fairbanks, Alaska, United States. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Edward Bostrom, North Pole Acres, 6 1/2 Mile Eielson Farm Road, P.O. Box 56822, North Pole, Alaska 99705, United States. Received 08/16/1993.

PI 638181. Rubus hybrid
Cultivar. "Kiska"; CRUB 1741. Pedigree - Rubus strigosus x 'Cuthbert'.

The following were donated by C.T. Kennedy, California Rare Fruit Growers, 1315 33rd Ave., San Francisco, California 94122, United States. Received 03/15/1996.

PI 638182. Rubus hybrid
Cultivar. CRUB 1863. Pedigree - Complex hybrid derived from Comanche, Chehalem,Early Harvest, Thornfree and selections fromIllinois and North Carolina. 4x thornless arching. Loch Ness Orig. in Invergowrie, Scotland, by D.L. Jennings, Scottish Crop Res. Inst. Parentage complex. Introd. in 1988. Fruit: large; glossy black; good quality; ripens with or slightly earlier than Hull Thornless. Plant: semi-erect; spine free; less vigorous than chester, Hull and Black Satin; cold hardiness as good as or better than Chester and Hull.

The following were developed by James N. Moore, University of Arkansas, Dept. of Horticulture and Forestry, 316 Plant Sciences Building, Fayetteville, Arkansas 72701, United States; John R. Clark, University of Arkansas, Department of Horticulture & Forestry, 316 Plant Science, Fayetteville, Arkansas 72701, United States. Donated by Derek Peacock, USDA/ARS/NCGR-Corvallis, 33447 Peoria Rd, Corvallis, Oregon 97333-2521, United States. Received 01/02/1997.

PI 638183. Rubus hybrid
Cultivar. CRUB 1947. Pedigree - Ark. 791 x Ark. 1058.

The following were donated by Ken M. Spooner Farms, 9710 SR 162 East, Puyallup, Washington 98374-1814, United States. Received 03/07/2000.

PI 638184. Rubus hybrid
Cultivar. "Fertodi zamatos"; CRUB 2072. Orig. in Hungary by L. Kollanyi, M. German, and M. Kovacs, Res. Sta. Fertod. Fertodi Hungaria x Canby; se-lected in 1971; tested as F.4; introd. in 1986. Fertodi zamatos: Summer red raspberry. It is a mid-late variety. Fruit are med bright red, round, uniform and firm. The taste is harmoniously sweetish and sourish, pleasant, mid to late season, processing. Plant: very tall; winter hardy; productive. Good for fresh market and processing. Suitable for machine harvesting.

Unknown source. Received 10/12/2000.

PI 638185. Rubus sp.
Wild. CRUB 2130. Collected in Kazakhstan. Pedigree - Collected from the wild in Kazakhstan.

The following were donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 03/08/2001.

PI 638186. Rubus idaeus L.
Cultivar. ORUS 1838; CRUB 2136. Pedigree - Fallred x (OSC 1347 [Newburgh x OSC 902{Washington x Willamette}]).

PI 638187. Rubus idaeus L.
Cultivar. ORUS 1780-B; CRUB 2137. Pedigree - Meeker x Matsqui.

The following were donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 03/08/2001.

PI 638188. Rubus idaeus L.
Cultivar. "ORUS 1994"; OSC 1994; CRUB 2138. Pedigree - (Tetraploid) Malling Jewel x Ark. 62-59-1.

Unknown source. Received 08/31/2001.

PI 638189. Rubus crataegifolius Bunge
Wild. HVSC-007; CRUB 2142. Collected in Primorye, Russian Federation. Latitude 44° 17' 20" N. Longitude 133° 39' 7" E. Elevation 420 m. Yakovlesky District, 15 km E of Dostoyevka Elovy Pass. pull off at edge of road Gravelly loam soil Drainage fairly good slope flat. Pedigree - Collected from the wild in Primorye, Russian Federation.

Unknown source. Received 08/31/2001.

PI 638190. Rubus sachalinensis H. Lev.
Wild. HVSC-008; CRUB 2143. Collected in Primorye, Russian Federation. Latitude 44° 22' 32" N. Longitude 134° 39' 8" E. Elevation 400 m. 8 km E of Shumny, Camp 10, Dubovaya Mt. and Oak Mt. Smolyanka Creek. flat woodlands next to river. soil texture - gravely, humus-sand mix medium drainage associated vegetation: Populus, Salix, Fragaria orientalis. Pedigree - Collected from the wild in Primorye, Russian Federation.

Unknown source. Received 08/31/2001.

PI 638191. Rubus sachalinensis H. Lev.
Wild. HVSC-014; CRUB 2144. Collected in Primorye, Russian Federation. Latitude 44° 29' 40" N. Longitude 135° 23' 12" E. Elevation 712 m. 14 km SW of Dalnegorsk at overlook at Vysokogorsky Pass. very open flat slope, overview of mountains from the road soil texture was gravel-sand; drainage was excellent Associated vegetation: Sorbaria,

Alnus, Geum, Populus Solidago. Pedigree - Collected from the wild in Primorye, Russian Federation.

Unknown source. Received 08/31/2001.

PI 638192. Rubus sachalinensis H. Lev.
Wild. HVSC-036; CRUB 2146. Collected in Primorye, Russian Federation. Latitude 44° 41' 57" N. Longitude 135° 32' 58" E. Elevation 658 m. 14 KM NE Dalnegorsk, at a meadow at the end of the road. in meadow with poor drainage on the sides of the road. Pedigree - Collected from the wild in Primorye, Russian Federation.

Unknown source. Received 08/31/2001.

PI 638193. Rubus sachalinensis H. Lev.
Wild. HVSC-038; CRUB 2147. Collected in Primorye, Russian Federation. Latitude 44° 50' N. Longitude 135° 41' E. Elevation 580 m. 70 km NW Melnichnove by River. riparian, along river bank. Pedigree - Collected from the wild in Primorye, Russian Federation.

Unknown source. Received 08/31/2001.

PI 638194. Rubus sachalinensis H. Lev.
Wild. HVSC-068; CRUB 2148. Collected in Khabarovsk, Russian Federation. Latitude 49° 0' 25" N. Longitude 136° 28' 19" E. Elevation 43 m. 8 km from Aubovby Mbis edge of road, exposure was open, slope was flat soil texture was sandy. edge of road Associated vegetation: Cornus ceresia, Alnus, Betula platyphylla, Spirea. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

Unknown source. Received 08/31/2001.

PI 638195. Rubus sachalinensis H. Lev.
Wild. HVSC-071; CRUB 2149. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

Unknown source. Received 08/31/2001.

PI 638196. Rubus sachalinensis H. Lev.
Wild. HVSC-075; CRUB 2150. Collected in Khabarovsk, Russian Federation. Latitude 49° 22' 17" N. Longitude 137° 43' 52" E. Elevation 223 m. near Anyu River (the "Black Fly Camp!"). Open woods edge soil texture was sandy-loam, volcanic origin; drainage poor Associated vegetation: Salix, Sorbaria, Plantanus, Grasses, Tansy ragwort. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

Unknown source. Received 08/31/2001.

PI 638197. Rubus sachalinensis H. Lev.
Wild. HVSC-079; CRUB 2151. Collected in Khabarovsk, Russian Federation. Latitude 49° 18' 16" N. Longitude 137° 55' 18" E. Elevation 256

m. on Anyu River about 98 km W of the coast 98 km marker on the road. side of road near river; exposure 60% sun, slope 20%, aspect was SW facing, soil texture was gravel-black clay drainage medium. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

Unknown source. Received 08/31/2001.

PI 638198. Rubus sachalinensis H. Lev.
Wild. HVSC-080; CRUB 2152. Collected in Khabarovsk, Russian Federation. Latitude 49° 19' 13" N. Longitude 138° 3' 24" E. Elevation 340 m. Gobeellee and Bol Ertukulee Rivers - conjunction Honeybee house. Mountainous, open meadow Exposure was 80%; slope about 20%, Aspect : SW Soil texture was compacted with poor drainage. Open meadow Associated vegetation: Betula, Alnus, Plantain, Populus Sorbaria, Cottongrass Plants were abundant here. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

Unknown source. Received 08/31/2001.

PI 638199. Rubus sachalinensis H. Lev.
Wild. HVSC-084; CRUB 2153. Collected in Khabarovsk, Russian Federation. Latitude 49° 7' 15" N. Longitude 138° 14' 22" E. Elevation 353 m. Abkhcapalu River, Camp 18. Open area of burned over woods; exposure was 90% slope was flat and aspect was SW. Soil texture was black loam with medium drainage Associated vegetation: fireweed, white birch, pineapple weed. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

Unknown source. Received 08/31/2001.

PI 638200. Rubus arcticus L.
Wild. HVSC-088; CRUB 2154. Collected in Khabarovsk, Russian Federation. Latitude 49° 5' N. Longitude 139° 21' 51" E. Elevation 771 m. Classic bog environment 80% exposure, flat sphagnum bog Associated vegetation: leatherleaf, Vaccinium uliginosum. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

Unknown source. Received 08/31/2001.

PI 638201. Rubus sachalinensis H. Lev.
Wild. HVSC-092; CRUB 2155. Collected in Khabarovsk, Russian Federation. Latitude 49° 2' 51" N. Longitude 139° 27' 31" E. Elevation 811 m. near Mt. Palogoya wooded area beside road drainage poor. Associated Vegetation: Larix, Betula, Juglans, fireweed. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

Unknown source. Received 08/31/2001.

PI 638202. Rubus chamaemorus L.
Wild. HVSC-093; CRUB 2156. Collected in Khabarovsk, Russian Federation. Latitude 49° 10' 50" N. Longitude 140° 19' 54" E. Elevation 17 m. 4 km W of Vanino (Camp 19) within site of Sea of Japan drainage was

poor soil texture was bog-like but dryer at the moment. Associated vegetation: Empetrum nigrum, leatherleaf, Lycopodium, Larix, dwarf Vaccinium uliginosum, Vaccinium vitis-idaea, sundews. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

Unknown source. Received 08/31/2001.

PI 638203. Rubus sachalinensis H. Lev.
Wild. HVSC-103; CRUB 2157. Collected in Khabarovsk, Russian Federation. Latitude 49° 9' 43" N. Longitude 138° 56' 18" E. Elevation 389 m. Halfway River = Polovinka River 80% exposure, flat slope, SW aspect River crossed under the road Drainage poor. Associated vegetation: Alnus, Betula,Sorbaria, Fireweed. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

Unknown source. Received 08/22/2001.

PI 638204. Rubus caesius L.
Wild. CRUB 2158. Pedigree - collected from cultivated plants in an Arboretum Trostyanets Dendropark.

The following were donated by Chaim Kempler, Agassiz Research Station, P.O. Box 1000, Agassiz, British Columbia V0M 1A0, Canada. Received 03/28/2002.

PI 638205. Rubus idaeus L.
Cultivar. CRUB 2162. Fruit: Large, proght, glossy medium red, excellent quality with good flavor, most similar to Tulameen by firmer, easy to harvest. Plant: moderately productive, vigorous, upright, sturdy floricanes with medium length, upright, stiff laterals with wellspaced fruit, abundant red to purple primocanes, short spines on lower part of cane are not objectionable. Susceptible to cane Botrytis and to spur blight, may have some resistance to root rot, to date has not become naturally infected with raspberrybushy dwarf vius, resistant to common strain of North American aphid vector of the raspberry mosaic virus complex. HortScience 37(2):265.

The following were developed by Hugh A. Daubeny, Agriculture Canada, Vancouver Experiment Station, 6660 N.W. Marine Drive, Vancouver, British Columbia V6T 1X2, Canada; Chaim Kempler, Agassiz Research Station, P.O. Box 1000, Agassiz, British Columbia V0M 1A0, Canada. Donated by Chaim Kempler, Agassiz Research Station, P.O. Box 1000, Agassiz, British Columbia V0M 1A0, Canada. Received 03/28/2002.

PI 638206. Rubus idaeus L.
Cultivar. CRUB 2163. Malahat-A high-yielding, early-ripening, fresh-market raspberry. Orig. in Vancouver B.C., Catiada, by H.A. Daubeny and C. Kempler, Agriculture and Agri-Food Canada, Pacific Agr. Res. Cen-tre. Meeker x BCISCRI 7853/116 (selection has complex parentage including Nootka, Rubus occidentalis, R. phoenicolasius); cross made by HAD in 1985; selected in 1987; tested as BC 85-5-24; introd. in 1996. Propagated underaroyalty agreement by Sieglin Ent., Abbotsford, B.C. Fruit: large; firm; conic; glossy medium red; easy to harvest, flavor not as sweet as Chilliwack but considered good; good shelf life;

intermediate reaction to Botrytis post harvest rot; ripens earlier than any other high-quality Pacific Northwest variety. Plant: high yield; vigorous, fairly upright habit; adequate primocane numbers; winter hardiness appears similar to Meeker and less than Chilliwack. Relatively susceptible to spur blight; susceptible to cane spot; resistant to cane Botrytis; relatively susceptible to Phytophthora root rot in green-house screening test; susceptible to natural infection by raspberry bushy dwarf virus; resistant to the common strain of the North American aphid vector of the raspberry mosaic virus complex.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, U.S. Peace Corps, Cuerpo de Paz, Casilla #749, Sucre, Chuquisaca, Bolivia; Isabella Arevshatyan, Yerevan, Armenia; Mariam Emyan, USDA, Marketing Assistance Program, Armenia; Eleonora Gabrielian, Department of Plant Systemics, Geography National Academie of Sciences, Institute of Botany, Yerevan, Armenia; Samvel M. Gasparian, Scientific Research Center of Viticulture, Fruit Growing and Wine Making, Merdzavan, Armenia; Vrez Manakyan, Armenia Academie of Science, Institute of Botany, Yerevan, Armenia; Ashot A. Charchoglian, National Academie of Sciences, Institute of Botany, Yerevan, Armenia. Donated by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 12/21/2001.

PI 638207. Rubus idaeus L.
Wild. ARM-01-183; R. idaeus ARM-01-183; CRUB 2165. Collected 08/10/2001 in Armenia. Latitude 40° 4' 6" N. Longitude 44° 50' 6" E. Elevation 445 m. near Bjuzakan Village. Pedigree - Collected from the wild in Armenia.

PI 638208. Rubus idaeus L.
Wild. ARM-01-224; R. idaeus ARM-01-224; CRUB 2166. Collected 08/14/2001 in Armenia. Latitude 39° 46' 10" N. Longitude 45° 19' 46" E. Elevation 0 m. Pedigree - Collected from the wild in Armenia.

PI 638209. Rubus idaeus L.
Wild. ARM-01-464; R. idaeus ARM-01-464; CRUB 2167. Collected 08/20/2001 in Armenia. Latitude 40° 40' 6" N. Longitude 44° 53' 10" E. Elevation 660 m. very steep hillside above a canyon on the way to Dilijan Reserve. Pedigree – Collected from the wild in Armenia.

The following were collected by Paul Meyer, The University of Pennsylvania, Morris Arboretum, 9414 Meadowlark Avenue, Philadelphia, Pennsylvania 19118, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Gagik Movsisyan, Armenia; Alan Whittemore, U.S. National Arboretum, USDA, ARS, 3501 New York Avenue, NE, Washington, District of Columbia 20002-1958, United States; Ashot A. Charchoglian, National Academie of Sciences, Institute of Botany, Yerevan, Armenia; Pavel Humbaryan, Armenia Institute of Botany, Yerevan, Armenia; Yura Paityan, Armenia Institute of Botany, Yerevan, Armenia. Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/11/2002.

PI 638210. Rubus saxatilis L.
Wild. CRUB 2173. Collected 09/09/2002 in Armenia. Latitude 40° 28'

59" N. Longitude 45° 19' 15" E. Elevation 2104 m. Daranak Valley, Gegharkunik Marz province. Coppiced hillside with Sorbus spp., Amealnchier rotundifolia and Berberis vulgaris. Pedigree - Collected from the wild in Armenia.

PI 638211. Rubus idaeus L.
Wild. CRUB 2177. Collected 09/14/2002 in Armenia. Latitude 40° 59' N. Longitude 44° 39' E. Elevation 0 m. Purchased from roadside vendor near Alaverdi in Lori Marz province. Pedigree - Collected from the wild in Armenia.

The following were collected by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 10/29/2002.

PI 638212. Rubus sachalinensis H. Lev.
Wild. CRUB 2178. Collected 08/2002 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild near the Burea River, Khabarovsk.

PI 638213. Rubus sachalinensis H. Lev.
Wild. CRUB 2179. Collected 08/2002 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild near the Burea River, Khabarovsk.

PI 638214. Rubus sachalinensis H. Lev.
Wild. CRUB 2180. Collected 08/2002 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild near the Burea River, Khabarovsk.

PI 638215. Rubus chamaemorus L.
Wild. CRUB 2181. Collected 08/2002 in Khabarovsk, Russian Federation. Pedigree - Collected from the wild near the Burea River, Khabarovsk.

PI 638216. Rubus chamaemorus L.
Wild. CRUB 2182. Collected 08/2002 in Amur, Russian Federation. Pedigree - Collected from the wild near the Selemia River, Amur.

PI 638217. Rubus sachalinensis H. Lev.
Wild. CRUB 2183. Collected 08/2002 in Amur, Russian Federation. Pedigree - Collected from the wild near the Selemia River, Amur.

PI 638218. Rubus crataegifolius Bunge
Wild. CRUB 2184. Collected 08/2002 in Russian Federation. Pedigree - Collected from the wild near the Little Middle R. Khabarovsk.

PI 638219. Rubus crataegifolius Bunge
Wild. CRUB 2185. Collected 08/2002 in Primorye, Russian Federation. Latitude 43° 20' N. Longitude 132° 10' E. Elevation 0 m. Pedigree - Collected from the wild near Atem, Primorye.

Unknown source. Received 10/29/2002.

PI 638220. Rubus hawaiensis A. Gray
Wild. R. hawaiiensis Hosmer Grove; CRUB 2186. Collected in Hawaii, United States. Latitude 20° 46' N. Longitude 156° 14' 13" W. Elevation 2126 m. Hosmer Grove, Haleakala National Park. Pedigree - Collected from the wild on Maui Island in Hawaii.

Unknown source. Received 04/16/2002.

PI 638221. Rubus occidentalis L.
Cultivated. CRUB 2187; Munger open pollinated. Collected in Oregon, United States. Elevation 0 m. Seed collected at NCGR-Corvallis. Pedigree - Open pollinated 'Munger' black raspberry. These seeds were collected from a planting of Munger black raspberry for use as virus indicators. Original plants were tested by Richard Converse for viruses, and were considered to be a virus-free source. Seedlings from this seedlot have been used since 1983 as virus indicators for the NCGR Rubus collection, and occasionally distributed to other small fruit virus certification programs for similar use. Approximately 2500 seed in April, 2002. J. Postman 16 April, 2002. Fresh seed collected July 2006 from Munger Black Raspberry plants in Chad Finn's field planting on OSU Lewis Brown Farm.

The following were collected by Douglas Cook, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Jodi Smith-Jackson, USDA, ARS, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Jodi Jackson, USDA/ARS/NCGR, 33447 Peoria Road, Corvalis, Oregon 97333-2521, United States. Donated by James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/23/2002.

PI 638222. Rubus strigosus Michx.
Wild. OCJ-39; R. strigosus OCJ-39; CRUB 2188. Collected 09/16/2002 in Colorado, United States. Latitude 38° 27' 9" N. Longitude 107° 3' 31" W. Elevation 2478 m. South off US-50 on S-149, then south 1.5 miles on County Road 31. Willow creek, Gunnison River Watershed. Aspect: NE Associated vegetation: Populus deltoides and Rosa. Pedigree - Colleced from the wild in Colorado.

The following were collected by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/29/2002.

PI 638223. Rubus hawaiensis A. Gray
Wild. R. hawaiiensis M-04; CRUB 2189. Collected 05/24/2002 in Hawaii, United States. Latitude 20° 43' 22" N. Longitude 156° 18' 26" W. Elevation 1631 m. Maui: Waipoli Road into Polipoli State Park. Pedigree - Collected from the wild on Maui Island in Hawaii.

PI 638224. Rubus hawaiensis A. Gray
Wild. R. hawaiiensis M-05; CRUB 2190. Collected 05/24/2002 in Hawaii, United States. Latitude 20° 42' 37" N. Longitude 156° 18' 16" W. Elevation 1987 m. Maui: Waipoli Road into Polipoli State Park. Pedigree - Collected from the wild on Maui Island in Hawaii.

PI 638225. Rubus hawaiensis A. Gray
Wild. R. hawaiiensis M-06; CRUB 2191. Collected 05/24/2002 in Hawaii, United States. Latitude 20° 41' 56" N. Longitude 156° 18' 47" W. Elevation 1997 m. Maui: Waipoli Road into Polipoli State Park, about 1 mile past site M-05. Pedigree - Collected from the wild on Maui Island in Hawaii.

The following were developed by Alverides Santos, EMBRAPA/Clima Temperado, Pelotas, Rio Grande do Sul, Brazil. Donated by Maria do Carmo Bassols Raseira, Ministerio De Agricultura, EMBRAPA/CPACT, Caixa Postal 403, Pelotas, Rio Grande do Sul 96001-970, Brazil. Received 02/05/2003.

PI 638226. Rubus hybrid
Cultivar. CRUB 2192. Pedigree - Wild trailing blackberry from Uruguay x Comanche. A thorny, large-fruited, erect blackberry. Fruit: large 7 to 9 g, firm, long, well-balanced flavor and sweetness/acidity, seeds smaller than many cultivars, ripens early to midseason. Plant: thorny, erect canes,vigorous plants with moderate suckeringfrom the roots, productive with average production under Southern Brazil conditions of 3.8 kg/plant, is adapted to mild winter areas.

The following were developed by Francis J. Lawrence, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 03/13/2003.

PI 638227. Rubus idaeus L.
Cultivar. CRUB 2193. Pedigree - OSC 1838 (Fallred x OSC 1347) x OSC 1842 (NY 600 x OSC 1347). CHINOOK ripens its primocane crop 7-12 days before 'Heritage' the most widely grown primocane-fruiting cultivar in the world. CHINOOK has had very high yields (20356 kg/ha); similar to 'Heritage' (20352 kg/ha). The fruit are more round than conic, extremely firm, and dry, with an attractive red color similar to 'Heritage'; The fruit are much larger than 'Heritage' (3.1-3.7 g vs 2.3-2.5 g). The fruit pick easily from the plant when ripe, however, commercial growers must train pickers carefully on the appropriate stage for picking as red, but underripe, fruit can be difficult to pick. Fruit flavor has been rated as similar to or slightly better than 'Heritage' and is similar to 'Summit'. CHINOOK can be shipped long distances, much better than 'Autumn Bliss', in part because of its fruit firmness and skin toughness. CHINOOK has been successfully air-freighted from the Pacific Northwest to the East Coast of the U.S. by commercial producers. While CHINOOK will mostly be grown for its fresh crop, it processes well as an individually quick frozen (IQF) product. CHINOOK plants are vigorous but shorter (1.55 m, ~38 nodes) than Heritage (1.64 m, ~43 nodes). The canes are slightly smaller in diameter than 'Heritage' and they are not a sturdy. The combination of heavy fruit load and less sturdy canes produces a plant that must be supported. CHINOOK produces more canes than does 'Heritage'. While CHINOOK has on average 5 node shorter canes than 'Heritage', the average number of fruiting nodes is only 1.4 less than 'Heritage' (16.4 vs 17.8). The spines on CHINOOK canes are infrequent with 2-3 purple spines per internode compared to 8-10 for 'Heritage'. CHINOOK is expected to be susceptible to the common strain of raspberry bushy dwarf virus (RBDV), however, CHINOOK has shown no particular susceptibility to fungal diseases. Very little botrytis fruit

rot (Botrytis cinerea) has been seen on CHINOOK, although it ripens in the Pacific Northwest at a time when there is very little rain.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 05/02/2003.

PI 638228. Rubus armeniacus Focke
Wild. CRUB 2195. Collected in Oregon, United States. Latitude 44° 33' 44" N. Longitude 123° 13' 55" W. Elevation 70 m. Found along fence at the NCGR-Corvallis. Along edge of cultivated field. Collected 05/02/2003 in Oregon, United States. Latitude 44° 33' 44" N. Longitude 123° 13' 55" W. Elevation 70 m. Found along fence at the NCGR-Corvallis. Along edge of cultivated field. Pedigree - Collected from the wild in Oregon.

PI 638229. Rubus armeniacus Focke
Wild. CRUB 2196. Collected in Oregon, United States. Latitude 44° 33' 44" N. Longitude 123° 13' 55" W. Elevation 70 m. Found along fence at the NCGR-Corvallis. Along edge of cultivated field. Collected 05/02/2003 in Oregon, United States. Latitude 44° 33' 44" N. Longitude 123° 13' 55" W. Elevation 70 m. Found along fence at the NCGR-Corvallis. Along edge of cultivated field. Pedigree - Collected from the wild in Oregon.

PI 638230. Rubus armeniacus Focke
Wild. CRUB 2197. Collected in Oregon, United States. Latitude 44° 33' 44" N. Longitude 123° 13' 55" W. Elevation 70 m. Found along fence at the NCGR-Corvallis. Along edge of cultivated field. Collected 05/02/2003 in Oregon, United States. Latitude 44° 33' 44" N. Longitude 123° 13' 55" W. Elevation 70 m. Found along fence at the NCGR-Corvallis. Along edge of cultivated field. Pedigree - Collected from the wild in Oregon.

The following were collected by James Glen Melcher, 3633 Rigolette, Pineville, Louisiana 71360, United States. Received 09/2002.

PI 638231. Rubus sp.
Wild. CRUB 2198. Collected 09/2002 in Louisiana, United States. Elevation 0 m. Rapides Parish. Pedigree - Collected from the wild in Louisiana.

PI 638232. Rubus sp.
Wild. CRUB 2199. Collected 09/2002 in Louisiana, United States. Elevation 0 m. Rapides Parish. Pedigree - Collected from the wild in Louisiana.

PI 638233. Rubus sp.
Wild. CRUB 2200. Collected 09/2002 in Louisiana, United States. Elevation 0 m. Rapides Parish. Pedigree - Collected from the wild in Louisiana.

PI 638234. Rubus sp.
Wild. CRUB 2201. Collected 09/2002 in Louisiana, United States. Elevation 0 m. Rapides Parish. Pedigree - Collected from the wild in Louisiana.

PI 638235. Rubus sp.
Wild. CRUB 2202. Collected 09/2002 in Louisiana, United States. Latitude 31° 26' 50" N. Longitude 92° 34' 14" W. Elevation 34 m. One hundred feet off U.S. 71 on Tyson Road at Rock Hill, Grant Parish. Pedigree - Collected from the wild in Louisiana.

PI 638236. Rubus sp.
Wild. CRUB 2203. Collected 09/2002 in Louisiana, United States. Latitude 31° 26' 50" N. Longitude 92° 34' 14" W. Elevation 34 m. One hundred feet off U.S. 71 on Tyson Road at Rock Hill, Grant Parish. Pedigree - Collected from the wild in Louisiana.

PI 638237. Rubus sp.
Wild. CRUB 2205. Collected 09/2002 in Louisiana, United States. Latitude 31° 22' 36" N. Longitude 92° 29' 34" W. Elevation 26 m. Rigolette Road at Rigolette Bayou west of Tioga in Rapides Parish. Pedigree - Collected from the wild in Louisiana.

The following were developed by Barney Douglass, Rt. 3 Box 279, Hillsboro, Oregon 97124, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 05/2002.

PI 638238. Rubus hybrid
Cultivar. "Giant Douglass"; CRUB 2206. Pedigree - Sander (Boysen x Thornless Twin [Barney(Boysen x OSC 978) x (Lincoln x OSC 1282)]) x Lawrence([OSC 1282 x Barney(Boysen x OSC 978)] x [(Lincoln x Marion) x OSC 1191]). Barney Douglass was a private blackberry breeder who lived in Hillsboro, Oregon. Giant Douglass is a nonpatented, thornless trailing blackberry selection from Barney's program. The parents were Sander x Lawrence, neither were cultivars, but he prefered to give his selections names than numbers. In our plots, the fruit quality was excellent, yields were very good and the plant was not susceptible to any particular diseases. Thornlessness was derived from Austin Thornless. Chad Finn 07/2003.

The following were developed by Riwaka Research Station, Crop Research Division, Old Mill Road, Motueka, South Island, New Zealand. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 05/2002.

PI 638239. Rubus hybrid
Cultivar. "Riwaka Choice"; "Rawaka Choice"; CRUB 2207. Pedigree - Clonal selection of Boysenberry. Riwaka Choice is a clonal reselection from Boysenberry made from grower fields in New Zealand along with 60 other clones. It was trialed at the DSIR Riwaka Research Station (now HortResearch, Nelson Region) and released in 1979-1980. Riwaka Choice is identical to Boysenberry in flavour and season, but has larger thicker fruit with a stronger primocanes. Harvey Hall, July 2003.

The following were developed by USDA / ARS, Horticultural Crops Research Lab, 3420 NW Orchard Ave., Corvallis, Oregon 97330, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 05/2002.

PI 638240. Rubus idaeus L.
Cultivar. "ORUS 1735-1"; CRUB 2208. Pedigree - Puget Reliance x ORUS 1267-250 (Redcrest x ORUS 869-13 [WSU1623 x Redgem]). ORUS 1735-1 a short-day cultivar with high yeilds. Fruit are large; very attractive

conic; excellent firmness, flavour and color. Excellent processing quaillity, although external color very bright red which is more suited to fresh picking. Plants are vigorous and open with fruit clearly visible. May be susceptible to black root rot.

The following were collected by Douglas Cook, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 07/23/2003.

PI 638241. Rubus lasiococcus A. Gray
Wild. DC2001-3; CRUB 2209. Collected 08/12/2001 in Oregon, United States. Latitude 43° 41' 44" N. Longitude 122° 2' 38" W. Elevation 1650 m. Shadow Bay Campground, Waldo Lake, Willamette National Forest. Alpine fir, Vaccinium sp. and Gaultheria sp. Pedigree - Collected from the wild in Oregon.

PI 638242. Rubus strigosus Michx.
Wild. DC2001-6; CRUB 2210. Collected 10/09/2001 in North Dakota, United States. Latitude 48° 58' 4" N. Longitude 101° 56' 59" W. Elevation 495 m. One-tenth mile north of county road 2 along west side of River Road opposite some farm buildings. Upper flood plain of Souris River with Crataegus sp. and Humulus lupulus. Pedigree - Collected from the wild in North Dakota.

The following were collected by Mark Shelly, 5 Culpepper Court, Jackson, New Jersey 08527, United States. Received 08/12/2003.

PI 638243. Rubus occidentalis L.
Wild. Manasquan Reservoir; CRUB 2211. Collected 07/2003 in New Jersey, United States. Latitude 40° 11' 1" N. Longitude 74° 12' 33" W. Elevation 33 m. Along trail around the Manasquan Reservoir in Howell, Monmouth County, New Jersey. Pedigree - Collected from the wild in New Jersey.

PI 638244. Rubus occidentalis L.
Cultivated. Toms River; CRUB 2212; R. occidentalis Toms River. Collected 08/2003 in New Jersey, United States. Latitude 40° 17' 15" N. Longitude 74° 10' 21" W. Elevation 23 m. The Berry Farm, Colts Neck, Monmouth County, New Jersey. The seeds were collected from a parent used by 5 Aces Breeding residing at The Berry Farm, Colts Neck, Monmouth County, New Jersey. The farm is run by Mark Ciotoli. This plant was surrounded by red raspberries with the black raspberry variety Jewell much further away. I have observed a primocane fruiting branch this year on this plant. It was originally collected in Toms River, Ocean County, New Jersey.

PI 638245. Rubus allegheniensis Porter
Wild. The Berry Farm; CRUB 2213. Collected 08/2003 in New Jersey, United States. Latitude 40° 17' 15" N. Longitude 74° 10' 12" W. Elevation 23 m. The Berry Farm, Colts Neck, Monmouth County, New Jersey. Pedigree – Collected from the wild in New Jersey.

PI 638246. Rubus odoratus L.
Wild. Route 23; CRUB 2214. Collected 08/2003 in New Jersey, United States. Latitude 10° 6' 6" N. Longitude 74° 34' 44" W. Elevation 177 m. Roadside of Route 23 near Ogdensburg, New Jersey. Pedigree - Collected from the wild in New Jersey. A sample fruit was 7/8 inch in

diameter, fairly flat, and with seeds smaller than found in red raspberry cultivars. A sample inflorescence had 24 flowers, flowering over many weeks. Flowers 2-1/4 inch in diameter starting as a bright reddish purple and fading to a pale purple.

PI 638247. Rubus odoratus L.
Wild. Beaver Lake Rail Trail; CRUB 2215. Collected 08/2003 in New Jersey, United States. Latitude 41° 4' 41" N. Longitude 74° 33' 36" W. Elevation 390 m. Beaver Lake rail trail, Ogdensburg, Sussex County, New Jersey. Pedigree - Collected from the wild in New Jersey. A sample fruit had 145 drupelets with small seeds. Ripe fruit separated whole from the receptacle easily.

The following were collected by Douglas Cook, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 07/14/2003.

PI 638248. Rubus sp.
Wild. DC2003-7; CRUB 2216. Collected 07/13/2003 in Oregon, United States. Latitude 43° 34' 31" N. Longitude 122° 39' 35" W. Elevation 1680 m. Along trail near summit of Mt. Bohemia, 25 miles southeast of Cottage Grove, Lane county. Open forest, western side of mountain in moist soil/litter. Pedigree - Collected from the wild in Oregon.

The following were collected by Mark Shelly, 5 Culpepper Court, Jackson, New Jersey 08527, United States. Received 09/09/2003.

PI 638249. Rubus odoratus L.
Wild. Cushetunk Mountain; CRUB 2217. Collected 08/2003 in New Jersey, United States. Latitude 40° 37' 51" N. Longitude 74° 49' 28" W. Elevation 0 m. Cushetunk Mountain, Lebanon, New Jersey. Pedigree - Collected from the wild in New Jersey.

The following were collected by James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Jodi Smith-Jackson, USDA, ARS, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Donated by James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/22/2003.

PI 638250. Rubus strigosus Michx.
Wild. OJ-2003-10; CRUB 2219. Collected 09/15/2003 in Arizona, United States. Latitude 31° 52' 7" N. Longitude 109° 17' 6" W. Elevation 2835 m. Cochise county, Chiricahua Mountain, along crest trail, long park to chiricahua peak. Pedigree - Collected from the Wild.

The following were collected by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States; James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; David E. Williams, USDA/FAS/ICD/RSED, 1400 Independence Ave. SW, South Building - Room 3223, Washington, District of Columbia 20250-1084, United States. Donated by Wes

Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Received 12/03/2003.

PI 638251. Rubus floribundus Kunth
Wild. R. robustus WM338; WM338; CRUB 2220. Collected 02/26/1995 in La Paz, Bolivia. Latitude 16° 53' 54" S. Longitude 67° 9' 48" W. Elevation 3150 m. 2.8 km west of Inquisivi on road to Quime (19 km northeast of Quime). Common on roadsides in distruded, cultivated areas, Eucalyptus the sole tree. Many Orchidaceae, Bignoneaceae, Bromeliaceae. Pedigree - Collected from the wild in Bolivia.

The following were collected by Kristine Naess, Centre de Recherches Les buissons, 358, Rue Principale, Pointe-Aux-Outardes, Quebec G0H 1M0, Canada. Received 12/04/2003.

PI 638252. Rubus chamaemorus L.
Wild. R. chamaemorus BS2; Blanc Sablon 2; CRUB 2221. Collected 08/2002 in Quebec, Canada. Latitude 51° 28' 14" N. Longitude 57° 11' 36" W. Elevation 0 m. From the Blanc Sablon area on the border of Quebec and Labrador. BS2 (CRUB 2221) is from an area bounded by UTM zone 21; E486385 N5701888, E486575 N5702188 and E486475 N5702588. Pedigree - Collected from the wild in Canada.

PI 638253. Rubus chamaemorus L.
Wild. R. chamaemorus I48; I48; CRUB 2222. Collected 08/2002 in Quebec, Canada. Latitude 51° 29' 19" N. Longitude 57° 10' 27" W. Elevation 0 m. From the Blanc Sablon area on the border of Quebec and Labrador. I48 (CRUB 2222) is from a site at UTM zone 21 E487912 N5704168. Pedigree – Collected from the wild in Canada.

The following were collected by Douglas Cook, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/15/2003.

PI 638254. Rubus laciniatus Willd.
Wild. R. laciniatus DC2003-16; DC2003-16; CRUB 2223. Collected 10/13/2003 in British Columbia, Canada. Latitude 48° 45' 44" N. Longitude 123° 38' 39" W. Elevation 2 m. Cowichan River delta, along Tzouhalem Road, southeast of Duncan. Rosa sp., Creteagus sp., Sambucus sp. and Symphoracarpos sp. Pedigree - Collected from the wild in British Columbia, Canada.

PI 638255. Rubus laciniatus Willd.
Wild. R. laciniatus DC2003-17; DC2003-17; CRUB 2224. Collected 10/13/2003 in British Columbia, Canada. Latitude 48° 45' 19" N. Longitude 123° 39' 49" W. Elevation 2 m. Cowichan River delta, along Cowichan Bay Road, southeast of Duncan. Half way from Highway 1 to junction with Tzouhalem Road. Rosa sp., and Symphoracarpos sp. Pedigree - Collected from the wild in British Columbia, Canada.

The following were collected by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States; James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; David E. Williams,

USDA/FAS/ICD/RSED, 1400 Independence Ave. SW, South Building - Room 3223, Washington, District of Columbia 20250-1084, United States. Donated by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Received 12/03/2003.

PI 638256. Rubus roseus Poir.
Wild. R. roseus WM417; WM417; CRUB 2225. Collected 03/09/1995 in La Paz, Bolivia. Latitude 16° 8' 46" S. Longitude 68° 7' 1" W. Elevation 2950 m. 20.2 km north of dam at Laguna Zongo (39.4 km from junction of road to Chacaltaya). 0.7 km above hydroelectric plant at Cuti Khuchu. In upper edge of cloud forest (below disturbed shurbland. Scrambling through roadside trees. Pedigree - Collected from the wild in Bolivia.

The following were donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 01/22/2004.

PI 638257. Rubus hybrid
Cultivar. "Black Diamond"; NZ 9128R-1; CRUB 2229. Pedigree - Kotata x NZ 8610L-163 (E90 x N-71).

PI 638258. Rubus hybrid
Cultivar. NZ 9351-4; CRUB 2230.

PI 638259. Rubus hybrid
Cultivar. "Obsidian"; ORUS 1369-3; CRUB 2231. Pedigree - ORUS 828-43 x ORUS 1122-1.

PI 638260. Rubus hybrid
Cultivar. "Black Pearl"; ORUS 1380-1; CRUB 2232. Pedigree - ORUS 1117-11 x ORUS 1122-1.

PI 638261. Rubus hybrid
Cultivar. ORUS 1431-1; CRUB 2233.

The following were donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 01/22/2004.

PI 638262. Rubus hybrid
Cultivar. "Metolius"; ORUS 1452-1; CRUB 2234. Pedigree - Douglas x Kotata.

The following were donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 01/22/2004.

PI 638263. Rubus hybrid
Cultivar. "Nightfall"; ORUS 1486-2; CRUB 2235. Pedigree - Marion x Waldo.

PI 638264. Rubus hybrid
Cultivar. ORUS 1843-1; CRUB 2236.

PI 638265. Rubus hybrid
Cultivar. ORUS 1843-3; CRUB 2237.

The following were collected by Pavel Cherbukin, Vavilov Research Institute, Far Eastern Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation; Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation; Luda Popova, Vavilov Research Institute, Far Eastern Experiment Station, Vavilov Road, House #9, Vladivostok, Primorye 690025, Russian Federation. Donated by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 01/29/2004.

PI 638266. Rubus arcticus L.
Wild. AS-03-043; CRUB 2238. Collected 08/16/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in sakhalin, Russian Federation.

PI 638267. Rubus chamaemorus L.
Wild. AS-03-044; CRUB 2239. Collected 08/25/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in sakhalin, Russian Federation.

PI 638268. Rubus chamaemorus L.
Wild. AS-03-045; CRUB 2240. Collected 08/29/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in sakhalin, Russian Federation.

PI 638269. Rubus chamaemorus L.
Wild. AS-03-046; CRUB 2241. Collected 08/27/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in sakhalin, Russian Federation.

PI 638270. Rubus pseudochamaemorus Tolm.
Wild. AS-03-047; CRUB 2242. Collected 08/16/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in sakhalin, Russian Federation.

PI 638271. Rubus pseudochamaemorus Tolm.
Wild. AS-03-048; CRUB 2243. Collected 08/17/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in sakhalin, Russian Federation.

PI 638272. Rubus sachalinensis H. Lev.
Wild. AS-03-049; CRUB 2244. Collected 07/26/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in sakhalin, Russian Federation.

PI 638273. Rubus sachalinensis H. Lev.
Wild. AS-03-050; CRUB 2245. Collected 07/27/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in sakhalin, Russian Federation.

PI 638274. Rubus sachalinensis H. Lev.
Wild. AS-03-051; CRUB 2246. Collected 08/16/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in sakhalin, Russian Federation.

PI 638275. Rubus sachalinensis H. Lev.
Wild. AS-03-052; CRUB 2247. Collected 08/16/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in sakhalin, Russian Federation.

PI 638276. Rubus sachalinensis H. Lev.
Wild. AS-03-053; CRUB 2248. Collected 08/17/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in sakhalin, Russian Federation.

PI 638277. Rubus sachalinensis H. Lev.
Wild. AS-03-054; CRUB 2249. Collected 08/18/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in sakhalin, Russian Federation.

PI 638278. Rubus sachalinensis H. Lev.
Wild. AS-03-055; CRUB 2250. Collected 08/18/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in sakhalin, Russian Federation.

PI 638279. Rubus sachalinensis H. Lev.
Wild. AS-03-056; CRUB 2251. Collected 08/20/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in sakhalin, Russian Federation.

PI 638280. Rubus sachalinensis H. Lev.
Wild. AS-03-057; CRUB 2252. Collected 08/23/2003 in Sakhalin, Russian Federation. Pedigree - Collected from the wild in sakhalin, Russian Federation.

The following were collected by Douglas Cook, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 05/20/2004.

PI 638281. Rubus trivialis Michx.
Wild. R. trivialis DC2004-1A; CRUB 2254. Collected 05/17/2004 in Georgia, United States. Latitude 33° 17' 7" N. Longitude 84° 17' 28" W. Elevation 0 m. North of Griffin, east side of U.S. 19/41 at Heads Creek, on south side of Holiday Inn parking lot. Southeast temperate forest, open area in creek drainage with Fucus and other Rubus spp. Among the other shurbs and trees there appeared to be an Ash and a Lilac. Pedigree - Collected from the wild in Georgia.

The following were developed by Cornell University, New York Agric. Exp. Station, Ithaca, New York, United States. Donated by Daniel P. Hartmann, Hartmann's Plant Company, 310 60th Street, Grand Junction, Michigan 49056, United States; Indiana Berry and Fruit Co., 5218 West 500 S., Huntingburg, Indiana 47542, United States. Received 05/27/2004.

PI 638282. Rubus idaeus L.
Cultivar. "Encore"; NY7; CRUB 2255. Pedigree - Canby x Cherokee. Encore matures late, peaking in production late in the season, and extends the red raspberry harvest into August,' said Maloney. 'Encore' originated from a cross of 'Canby' x 'Cherokee', and was previously tested as NY7. 'Encore' has excellent winter hardiness in Zone 5, has very good root suckering and vigor, and produces above average commercial fruit yields. Fruit average 2.9 grams per berry, are attractive, with firm texture, and have a good balanced flavor. Linda McCandless, Cornell University, New York State Agricultural Experiment Station.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan; Takao Sato, Hokkaido Forestry Research Institute, General Research and Information Center, Koshunai, Bibai, Hokkaido 0079-0918, Japan. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 638283. Rubus mesogaeus Focke
Wild. R. mesogaeus J04; HD-2004-04; CRUB 2256. Collected 07/09/2004 in Hokkaido, Japan. Latitude 43° 17' 24" N. Longitude 141° 51' 15" E. Elevation 33 m. In Bibai at the Hokkaido Forestry Research Institute. Originally collected from the wild but seed of this accession was collected from cultivated plants at the HFRI in Bibai. Pedigree - Collected in the wild from Hokkaido,Japan. Hokkaido Forestry Research Institute and Greenery Research and Information Center is a state run facility by the Prefecture of Hokkaido. Native woody plants of Hokkaido are studied at this center. Dr. Takao Sato is a senior research scientist at this center and has written a book on 'Trees and Shrubs of Hokkaido'. Dr. Sato guided us through the collections at the HFRI. This accession was collected from cultivated plants of originally wild collected species growing in the experimental gardens. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U.S. Department of Agriculture, Agricultura Service, USA, prepared in May 2004.

PI 638284. Rubus crataegifolius Bunge
Wild. R. crataegifolius J05; HD-2004-05; CRUB 2257. Collected 07/09/2004 in Hokkaido, Japan. Latitude 43° 17' 24" N. Longitude 141° 51' 15" E. Elevation 33 m. In Bibai at the Hokkaido Forestry Research Institute. Originally collected from the wild but seed of this accession was collected from cultivated plants at the HFRI in Bibai. Pedigree - Collected in the wild from Hokkaido,Japan. Hokkaido Forestry Research Institute and Greenery Research and Information Center is a state run facility by the Prefecture of Hokkaido. Native woody plants of Hokkaido are studied at this center. Dr. Takao Sato is a senior research scientist at this center and has written a book on 'Trees and Shrubs of Hokkaido'. Dr. Sato guided us through the collections at the HFRI. This accession was collected from cultivated plants of originally wild collected species growing in the experimental gardens. ence

enceThis accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultura Service, USA, prepared in May 2004.

PI 638285. Rubus pseudojaponicus Koidz.
Wild. R. pseudojaponicus J12; HD-2004-12; CRUB 2258. Collected 07/09/2004 in Hokkaido, Japan. Latitude 43° 17' 24" N. Longitude 141° 51' 15" E. Elevation 33 m. In Bibai at the Hokkaido Forestry Research Institute. Seed of this accession was collected from cultivated plants at the HFRI in Bibai. Originally collected from an Alpine environment. Pedigree - Collected in the wild from Hokkaido, Japan. Hokkaido Forestry Research Institute and Greenery Research and Information Center is a state run facility by the Prefecture of Hokkaido. Native woody plants of Hokkaido are studied at this center. Dr. Takao Sato is a senior research scientist at this center and has written a book on 'Trees and Shrubs of Hokkaido'. Dr. Sato guided us through the collections at the HFRI. This accession was collected from cultivated plants of originally wild collected species growing in the experimental gardens. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U.S. Department of Agriculture, Agricultura Service, USA, prepared in May 2004. This accession was collected under the auspisis of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U.S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 638286. Rubus pseudojaponicus Koidz.
Wild. R. pseudojaponicus J16; HD-2004-16; CRUB 2259. Collected 07/10/2004 in Hokkaido, Japan. Latitude 42° 51' 24" N. Longitude 141° 5' 44" E. Elevation 823 m. Nakayama Pass on Rt 230 1 hr SE of Sapporo, Jozankei kokudo parkway. Collected along path about 0.5 m, leading away from the parkway. Under bamboo, growing with Actinidia kolomikta, Rubus idaeus, Petasites gigante, Salix and Artemesia. Pedigree - Collected in the wild from Hokkaido,Japan. open pollinated population sample of multiple plants. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004. Fruits were just beginning to ripen. Few drupelets per berry (2 - 9). Many green fruit were collected since so few ripe fruit were available. This plant is stoloniferous and

pentaphyllus. Seems to pro the first year then an upright the second year. Fruit are presented on short pedicel rising above the leaves in the same manner that Rubus chamaemorus fruits.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan; Shigeru Uemura, Hokkaido University, Field Science Center for Northern Biosphere, North Forest Research Labratory, Nayoro, Hokkaido 096-0071, Japan. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 638287. Rubus sachalinensis H. Lev.
Wild. R. idaeus var aculeatissimus J24; HD-2004-24; CRUB 2260. Collected 07/13/2004 in Hokkaido, Japan. Latitude 44° 23' 2" N. Longitude 142° 17' 29" E. Elevation 550 m. North Forest Research Laboratory (Tokuda 250, Nayoro), about 0.75 km north of the main building, growing on edge of road. Associated species: Plantain, Rhus, Polygonum, Artemesia. Bamboo and Fragaria iinumae. Pedigree - Collected in the wild from Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004. Fruits were unavailable; only plants were collected. Too early in the season for the fruits.

PI 638288. Rubus chamaemorus L.
Wild. R. chamaemorus J30; HD-2004-30; CRUB 2261. Collected 07/13/2004 in Hokkaido, Japan. Latitude 44° 23' 51" N. Longitude 142° 12' 16" E. Elevation 289 m. North Forest Research Laboratory (Tokuda 250, Nayoro), Swampy area, growing directly out of sphagnum. Associated species: Sphagnum, Picea glehnii Polygonum, Artemesia, bamboo and Ilex crinida. Pedigree - Collected in the wild from Hokkaido,Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan; Mutsumi Takahashi, Hokkaido Governmental Plant Genetic Resources Center (HPGRC), 363-2 Minamitakinokawa, Takikawa, Hokkaido 073-1103, Japan. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 638289. Rubus pseudojaponicus Koidz.
Wild. R. pseudo-japonicus J32; HD-2004-32; CRUB 2262. Collected 07/14/2004 in Hokkaido, Japan. Latitude 44° 28' 34" N. Longitude 142° 8' 32" E. Elevation 379 m. North Forest Research Laboratory (Tokuda 250, Nayoro), 4 km NE of the main building at edge of bog. Edge of sphagnum bog, growing in brown clay soil, open exposure. Associated species on bog edge: Picea glehnii, Bamboo, Trilium, Rhus and Hydrangea. Pedigree - Collected in the wild from Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638290. Rubus chamaemorus L.
Wild. R. chamaemorus J33; HD-2004-33; CRUB 2263. Collected 07/14/2004 in Hokkaido, Japan. Latitude 44° 28' 34" N. Longitude 142° 8' 32" E. Elevation 379 m. North Forest Research Laboratory (Tokuda 250, Nayoro), 4 km NE of the main building at edge of bog. Edge of sphagnum bog, open exposure, Associated species on bog edge: Picea glehnii, bamboo. Pedigree - Collected in the wild from Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004. We observed more male flowers than female flowers, although both were seen. Most bloom was past, i.e., petals had fallen, but the berries were small and green. Only a few fruits were collected. Plant ess than 20 cm. The patch of plants that we collected from extended for 60 meters on the bog edge. The plants were adjacent to and protected by the bamboo. There were other patches of the Rubus chamaemorus out in the middle of the bog in association with sundews and on higher tufts.

PI 638291. Rubus sachalinensis H. Lev.
Wild. R. idaeus var. aculeatissimus J34; HD-2004-34; CRUB 2264. Collected 07/14/2004 in Hokkaido, Japan. Latitude 44° 28' 34" N. Longitude 142° 8' 32" E. Elevation 379 m. North Forest Research Laboratory (Tokuda 250, Nayoro), 4 km NE of the main building at edge of bog. Edge of sphagnum bog, growing in brown clay soil, open exposure. Associated species on bog edge: Picea glehnii, Bamboo, Rubus pseudojaponicus and Rhus. Pedigree - Collected in the wild from Hokkaido,Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 638292. Rubus sachalinensis H. Lev.
Wild. R. idaeus var. aculeatissimus J37; HD-2004-37; CRUB 2266. Collected 07/15/2004 in Hokkaido, Japan. Latitude 44° 48' 57" N. Longitude 142° 15' 46" E. Elevation 171 m. North of Otoineppu-mura on forest trail off of route 275. Edge of road, open light exposure. Associated species: bamboo, Betula platyphylla, big leaf(Petasites giganteus), Hackweed, Rhus and white clover. Pedigree - Collected in the wild from Hokkaido, Japan. Hokkaido Forestry Research Institute and Greenery Research and Information Center is a state run facility by the Prefecture of Hokkaido. Native woody plants of Hokkaido are studied at this center. Dr. Takao Sato is a senior research scientist at this center and has written a book on 'Trees and Shrubs of Hokkaido'. Dr. Sato guided us through the collections at the HFRI. This accession was collected from cultivated plants of originally wild collected species growing in the experimental gardens. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultura Service, USA, prepared in May 2004.

PI 638293. Rubus pseudojaponicus Koidz.
Wild. R. pseudojaponicus J51; HD-2004-51; CRUB 2269. Collected 07/16/2004 in Hokkaido, Japan. Latitude 44° 51' 44" N. Longitude 142° 9' 2" E. Elevation 513 m. North of Otoineppu-mura, Mt. Pankesan, Nakagawa Experimental Forest, on the way down the mountain. Fruit were a bit back on a slope down to the road edge. Growing under the protection of bamboo. Associated species: bamboo, Alnus, plantain, Ilex and Cirsium (thisle). Pedigree - Collected in the wild from Hokkaido,Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638294. Rubus parvifolius L.
Wild. R. parvifolius J52; HD-2004-52; CRUB 2270. Collected 07/16/2004 in Hokkaido, Japan. Latitude 44° 55' 21" N. Longitude 141° 43' 18" E. Elevation 6 m. North of Teshio on the coast of Japan Sea, at a pull-off called Chusa Park, south of the windmill generators. Growing on black beach sand. Associated species: Rosa, Lathrus and Plantain. Pedigree - Collected in the wild from Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638295. Rubus sachalinensis H. Lev.
Wild. R. idaeus var. aculeatissimus J56; HD-2004-56; CRUB 2271. Collected 07/17/2004 in Hokkaido, Japan. Latitude 44° 5' 39" N. Longitude 143° 21' 43" E. Elevation 95 m. Shimararagy River, about 2 km N of Monbetsu, back from edge of road on hill leading away from road. Associated species: bamboo, Vaccinium hirtum, Vaccinium vitis-idaea, lycopodium and azalea. Growing under oak. Pedigree - Collected in the wild from Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods,

Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638296. Rubus pseudojaponicus Koidz.
Wild. R. pseudojaponicus J62; HD-2004-62; CRUB 2273. Collected 07/18/2004 in Hokkaido, Japan. Latitude 43° 39' 54" N. Longitude 143° 6' 16" E. Elevation 933 m. North end of tunnel near Kinshinotaki on provencial route 39 growing along the side of the road. Growing on the south side of the tunnel, on steep slope under Abies sachalinensis. Associated species: Abies sachalinensis, bamboo, Alnus, Artemesia and Ribes horridum. Pedigree - Collected in the wild from Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U.S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638297. Rubus pseudojaponicus Koidz.
Wild. R. pseudojaponicus J65; HD-2004-65; CRUB 2274. Collected 07/18/2004 in Hokkaido, Japan. Latitude 43° 39' 17" N. Longitude 143° 9' 54" E. Elevation 1070 m. Sekihoka Pass, on provencial route 39, behind the shrine to the wood gods. Associated species: moss. Pedigree - Collected in the wild from Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U.S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638298. Rubus sachalinensis H. Lev.
Wild. R. idaeus var. aculeatissimus J68; HD-2004-68; CRUB 2275. Collected 07/18/2004 in Hokkaido, Japan. Latitude 43° 40' 42" N. Longitude 143° 23' 40" E. Elevation 588 m. On route 88 about 5 km south from the Route 39 junction, at road's edge, near Rubeshibe-cho. near Rubeshibe-cho. Open exposure on brown-gray soil complex of volcanic origin. Pedigree - Collected in the wild from Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U.S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638299. Rubus sachalinensis H. Lev.
Wild. R. idaeus var. aculeatissimus J75; HD-2004-75; CRUB 2277. Collected 07/19/2004 in Hokkaido, Japan. Latitude 43° 25' 25" N. Longitude 145° 15' 8" E. Elevation 11 m. Barasato Lake, about 5 km inland from highway 244 up the Nishibetsu River valley. Edge of road - open light, disturbed location. Associated species: Potentilla, grass and Artemesia. Pedigree - Collected in the wild from Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U.S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638300. Rubus pseudojaponicus Koidz.
Wild. R. pseudojaponicus J81; HD-2004-81; CRUB 2278. Collected 07/21/2004 in Hokkaido, Japan. Latitude 42° 58' 6" N. Longitude 144° 43' 36" E. Elevation 53 m. Akkeshi-wan peninsula, on darker side of forest. Associated species: growing under Abes sachalinensis, braken fern, Rhus, big leaf, Vitis and Artemesia. Pedigree - Collected

in the wild from Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U.S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638301. Rubus sachalinensis H. Lev.
Wild. R. idaeus var. aculeatissimus J82; HD-2004-82; CRUB 2279. Collected 07/21/2004 in Hokkaido, Japan. Latitude 42° 58' 6" N. Longitude 144° 43' 36" E. Elevation 53 m. Akkeshi-wan peninsula, along side of road pull-off. In open sun with Fragaria yezoensis, Potentilla, grass and bigleaf. Pedigree - Collected in the wild from Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U.S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638302. Rubus mesogaeus Focke
Wild. R. mesogaeus J90; HD-2004-90; CRUB 2280. Collected 07/22/2004 in Hokkaido, Japan. Latitude 42° 44' 40" N. Longitude 142° 50' 50" E. Elevation 513 m. Tottabetsu River drainage, near Mt. Tottabetsudake, about 10 km east of Obihiro. Growing on steep forest slope, on edge of roads and paths. Associated species: under Populus, Betula, Actinidia kolomikta, Hydrangea and Hydrangea. Pedigree - Collected in the wild from Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U.S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638303. Rubus sachalinensis H. Lev.
Wild. R. idaeus var. aculeatissimus J92; HD-2004-92; CRUB 2281. Collected 07/22/2004 in Hokkaido, Japan. Latitude 42° 44' 2" N. Longitude 142° 53' 8" E. Elevation 448 m. Tottabetsu River drainage, near Mt. Tottabetsudake, about 10 km east of Obihiro. Growing in damp swampy area near the river (weir present). Associated species: under Populus, Betula, Actinidia kolomikta, Hydrangea and Abies. Pedigree - Collected in the wild from Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U.S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638304. Rubus sachalinensis H. Lev.
Wild. R. idaeus var. aculeatissimus J93; HD-2004-93; CRUB 2282. Collected 07/23/2004 in Hokkaido, Japan. Latitude 42° 9' 12" N. Longitude 143° 0' 35" E. Elevation 298 m. Near Mt. Apoi, section 91, Toyukinazawa valley, along road edge. Associated species: under Acer, white clover, Artemesia, and Big leaf. Pedigree - Collected in the wild from Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U.S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638305. Rubus crataegifolius Bunge
Wild. R. crataegifolius J94; HD-2004-94; CRUB 2283. Collected 07/23/2004 in Hokkaido, Japan. Latitude 42° 9' 12" N. Longitude 143° 0' 35" E. Elevation 298 m. Near Mt. Apoi, section 91, Toyukinazawa valley, along road edge. Filtered light. Associated species: under Acer, white clover, Artemesia and Big leaf. Pedigree - Collected in the wild from Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U.S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638306. Rubus crataegifolius Bunge
Wild. R. crataegifolius J97; HD-2004-97; CRUB 2284. Collected 07/23/2004 in Hokkaido, Japan. Latitude 42° 9' 26" N. Longitude 143° 2' 45" E. Elevation 434 m. near Mt. Apoi, north of Mt. Pinneshiri, growing along the roadside. In open areas where light could filter through. Associated species: big leaf, Acer and Artemesia. Pedigree - Collected in the wild from Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U.S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638307. Rubus phoenicolasius Maxim.
Wild. R. phoenicolasius J98; HD-2004-98; CRUB 2285. Collected 07/23/2004 in Hokkaido, Japan. Latitude 42° 8' 28" N. Longitude 142° 57' 32" E. Elevation 43 m. near Mt. Apoi, north of Mt. Pinneshiri, growing along the roadside. In open areas where light could filter through. Pedigree - Collected in the wild from Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U.S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638308. Rubus parvifolius L.
Wild. R. parvifolius J100; HD-2004-100; CRUB 2286. Collected 07/09/2004 in Hokkaido, Japan. Latitude 42° 44' 40" N. Longitude 142° 50' 50" E. Elevation 513 m. Totabetsu River, near Mt. Tottabetsudake, about 10 km east of Obihiro, edge of road. Associated species: Pachysandra, fern and nettles. Pedigree - Collected in the wild from Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U.S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

The following were donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 07/26/2004.

PI 638309. Rubus ursinus Cham. & Schltdl.
Cultivar. "Variegatus"; CRUB 2287; Variegated Blackberry. Variegated Blackberry - Rubus ursinus 'Variegatus'. Chimeral chlorophyll mutation expressed as white leaf margins. Dancing Oaks Nursery obtained clone from Philip Curtis Farms, Oregon City, Oregon.

PI 638310. Rubus cockburnianus Hemsl.
Cultivar. "Aureus"; ruco022; Aureus (Wyevale); Golden Leaf Bramble; CRUB 2288. Pedigree - Selection of R. cockburnianus with chlorophyll mutation. Golden Leaved Bramble - Rubus cockburnianus 'Aureus'. Chlorophyll mutation. Form of R. cockburnianus with yellow leaves and stems. Dancing Oaks Nursery obtained clone from Kelly Dobson, Reflective Gardens, Poulsbo, Washington.Grown rm Nursery, Williams, Oregon, as cultivar 'Wyvale' (8/2005). Leaves of this 6 yo 8 foot fountain-like shrub are a brilliant gold, changing to lime-green in summer; in winter its white arching (with some thorns)branches are the show.

The following were collected by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 02/14/2003.

PI 638311. Rubus sachalinensis H. Lev.
Wild. CRUB 2289; R. sachalinensis - Cheremuhovaya. Collected in Primorye, Russian Federation. Elevation 0 m. Chetemuhouaya River. Pedigree - Collected from the wild in Primorye, Russian Federation.

The following were donated by Mark Shelly, 5 Culpepper Court, Jackson, New Jersey 08527, United States. Received 08/19/2004.

PI 638312. Rubus odoratus L.
Cultivated. YSN RO TB OP; R. odoratus Tripple Brook OP; CRUB 2290. Pedigree - Open pollinated R. odoratus.

PI 638313. Rubus odoratus L.
Cultivated. YST RO FF x OP; R. odoratus Forrest Farm OP; CRUB 2291. Pedigree - Open pollinated R. odoratus.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Developed by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 09/15/2004.

PI 638314. Rubus ursinus Cham. & Schltdl.
Breeding. GP 4-22; CRUB 2292. Collected 1993 in Oregon, United States. Pedigree - Selection of wild material from Oregon. In 1993 and 1994 we collected a great deal of Rubus ursinus from the Pacific Northwest as seed as well as vegetative cuttings. We grew these populations out in a common garden and used a number of parents in crosses. While we began with several thousand seedlings we have culled that down to about a dozen. These were either chosen as superior clones, representatives of superior populations, or in an attempt to keep the selection of R. ursinus germplasm broad. Tested as having a p by flow cytometry by Meng (1998). GP 4 population had many selections made from it. Was noted for good fruit size and crop but susceptible to foliar disease particularly septoria.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Angela Anderson, Agriculture Canada, Research Station, Canada. Developed by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 09/15/2004.

PI 638315. Rubus ursinus Cham. & Schltdl.
Breeding. GP 13s-7; CRUB 2293. Collected 1993 in Oregon, United States. Pedigree - Selection of wild material from Washington. In 1993 and 1994 we collected a great deal of Rubus ursinus from the Pacific Northwest as seed as well as vegetative cuttings. We grew these populations out in a common garden and used a number of parents in crosses. While we began with several thousand seedlings we have culled that down to about a dozen. These were either chosen as superior clones, representatives of superior populations, or in an attempt to keep the selection of R. ursinus germplasm broad. Tested as having a p by flow cytometry by Meng (1998). Collected as seed. When population grown out appeared to not be pure R. ursinus based on vegetative morphology and what appear to be hermaphroditic flowers. Best guess would be that it was a hybrid between R. ursinus and R. armeniacus (R. procerus). Extremely vigorous and disease resistant compared to typical R. ursinus but poor drupelet set. Subsequent hybridizations with R. ursinus derivatives and R. armeniacus have produced seed but no plants.

The following were collected by Angela Anderson, Agriculture Canada, Research Station, Canada. Developed by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 09/15/2004.

PI 638316. Rubus ursinus Cham. & Schltdl.
Breeding. GP 10-26; CRUB 2294. Collected 1993 in Oregon, United States. Pedigree - Selection of wild material from Oregon. In 1993 and 1994 we collected a great deal of Rubus ursinus from the Pacific Northwest as seed as well as vegetative cuttings. We grew these populations out in a common garden and used a number of parents in crosses. While we began with several thousand seedlings we have culled that down to about a dozen. These were either chosen as superior clones, representatives of superior populations, or in an attempt to keep the selection of R. ursinus germplasm broad. Tested as having a p by flow cytometry by Meng (1998). Collected as cutting. Selected originally for foliar disease tolerance, medium fruit size and large crop. Later tested in Abbotsford, BC where it survived the winters had only moderate foliar disease, was late ripening and was very productive.

The following were collected by Hugh A. Daubeny, Agriculture Canada, Vancouver Experiment Station, 6660 N.W. Marine Drive, Vancouver, British Columbia V6T 1X2, Canada. Developed by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 09/15/2004.

PI 638317. Rubus ursinus Cham. & Schltdl.
Breeding. GP 18-17; CRUB 2295. Collected 1993 in British Columbia, Canada. Pedigree - Selection of wild material from British Columbia, Canada. In 1993 and 1994 we collected a great deal of Rubus ursinus from the Pacific Northwest as seed as well as vegetative cuttings. We grew these populations out in a common garden and used a number of parents in crosses. While we began with several thousand seedlings we have culled that down to about a dozen. These were either chosen as superior clones, representatives of superior populations, or in an attempt to keep the selection of R. ursinus germplasm broad. Tested as having a p by flow cytometry by Meng (1998). Collected as cutting. Selected originally for large fruit size, moderate crop and reasonable tolerance to foliar disease. In trials in British Columbia it had good winter tolerance, produced a large crop with some very large fruit. Early ripening. Very good parent when crossed with Black Butte.

The following were developed by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 09/15/2004.

PI 638318. Rubus ursinus Cham. & Schltdl.
Breeding. LIG 2-6; CRUB 2296. Pedigree - Selection of wild material from Washington. In 1993 and 1994 we collected a great deal of Rubus ursinus from the Pacific Northwest as seed as well as vegetative cuttings. We grew these populations out in a common garden and used a number of parents in crosses. While we began with several thousand seedlings we have culled that down to about a dozen. These were either chosen as superior clones, representatives of superior populations, or in an attempt to keep the selection of R. ursinus germplasm broad. By Chad Finn, Jim Lurison, and Herbert Hoover in 1993. Elevation 792 m. Tested as having a ploidy of 12x by flow cytometry by Meng (1998). Collected as cutting. Originally selected for large crop, medium fruit, decent foliar disease tolerance. In trials in BC, was susceptible to foliar disease, and was not very vigorous. Has been an excellent parent in crosses with 'Douglass' (8x), 'Black Butte' (6x) and 'Waldo' (6x thornless). Siblings have also been good selections.

The following were developed by W.H. Perron. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 09/15/2004.

PI 638319. Rubus idaeus L.
Breeding. "Perron's Red"; CRUB 2297. Pedigree - Zeva Herbstemte x Pathfinder.

The following were donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 09/12/2004.

PI 638320. Rubus idaeus L.
Cultivar. ORUS 1112-2; CRUB 2298.

PI 638321. Rubus idaeus L.
Cultivar. ORUS 1117-11; CRUB 2299.

PI 638322. Rubus idaeus L.
Cultivar. ORUS 1122-1; CRUB 2300. Pedigree - Marion x OSC 878.

PI 638323. Rubus ursinus Cham. & Schltdl.
Cultivar. GP 18-17A; CRUB 2301.

The following were developed by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 11/08/1993.

PI 638324. Vaccinium hybrid
Breeding. CVAC 1157; Blue-Cran Hybrid NC 3400. Pedigree - V. crassifolium (NC 79) x V. macrocarpon (mixed pollen). The crassifolium was crossed with named cranberry clones.

The following were developed by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; G. J. Galletta, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States; Arlan D. Draper, 604 E. Park Dr., Payson, Arizona 85541, United States; T.F. Cannon, North Carolina, United States. Donated by Mark Ehlenfeldt, USDA, ARS, Rutgers Blueberry and Cranberry, Research Center, Chatsworth, New Jersey 08019, United States; Baldassare Mineo, Siskiyou Rare Plant Nursery, 2825 Cummings Road, Medford, Oregon 97501, United States; Baldassare Mineo, Siskiyou Rare Plant Nursery, 2825 Cummings Road, Medford, Oregon 97501, United States. Received 03/05/1998.

PI 638325. Vaccinium darrowii Camp
Cultivar. "NC 1137"; "Johnblue"; CVAC 1327. Pedigree - Seedling selection of open pollinated V. darrowii fromnorth-central Florida. The North Carolina Agricultural Research Service and the Science and Education Administration of the United States Department of Agriculture hereby introduce two ornamental evergreen, fine-leaved blueberry cultivars, EVERBLUE and JOHNBLUE, for trial by nurserymen and professional ornamental horticulturalists. EVERBLUE and JOHNBLUE, tested as NC 1136 and NC 1137 respectively, are the best adapted of a series of evergreen, low-growing, small blue-fruited blueberry selections of the diploid specie Vaccinium darrowii Camp evaluated in North Carolina. They were selected to complement azaleas and camellias in landscape plantings. They also show potential for indoor culture as pot plants or in hanging baskets. EVERBLUE and JOHNBLUE are open-pollinated seedlings from seed collected in north-central Florida. They were selected at Castle Hayne, N. C. by G. J. Galletta and T. F. Cannon in 1972 and evaluated by G. J. Galletta, A. D. Draper, and J. R. Ballington from 1972-1979. EVERBLUE and JOHNBLUE have been tested at Castle Hayne and Raleigh, N. C. and are currently under test in Louisiana and Virginia. Plants of these cultivars did not survive the first winter at Beltsville, Maryland. They are recommended for trial throughout eastern North Carolina and the southeastern United States. The new foliage of EVERBLUE and JOHNBLUE is an attractive blue-green and the foliage takes on a light pinkish hue during the fall and winter. The stems also turn reddish in the fall and winter. The fruit is small, sweet, flavorful, light blue in color and will attract birds. The plant shape of these new cultivars is generally a low rounded mound. JOHNBLUE will eventually

reach a mature height of 3 feet in eastern North Carolina, an EVERBLUE is somewhat lower reaching about 2 1/2 feet. Both EVERBLUE and JORNBLUE perform equally well as specimen plants or hedges. For best results outdoors additional organic matter will have to be added to the planting hole, as in azalea and camellia culture. These.

The following were developed by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; G. J. Galletta, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States; Arlan D. Draper, 604 E. Park Dr., Payson, Arizona 85541, United States; T.F. Cannon, North Carolina, United States. Donated by Mark Ehlenfeldt, USDA, ARS, Rutgers Blueberry and Cranberry, Research Center, Chatsworth, New Jersey 08019, United States. Received 10/08/1998.

PI 638326. Vaccinium darrowii Camp

Cultivar. "Everblue"; NC 1136; CVAC 1356. Pedigree - Seedling selection of open pollinated V. darrowii from north-central Florida. The North Carolina Agricultural Research Service and the Science and Education Administration of the United States Department of Agriculture hereby introduce two ornamental evergreen, fine-leaved blueberry cultivars, EVERBLUE and JOHNBLUE, for trial by nurserymen and professional ornamental horticulturalists. EVERBLUE and JOHNBLUE, tested as NC 1136 and NC 1137 respectively, are the best adapted of a series of evergreen, low-growing, small blue-fruited blueberry selections of the diploid specie Vaccinium darrowii Camp evaluated in North Carolina. They were selected to complement azaleas and camellias in landscape plantings. They also show potential for indoor culture as pot plants or in hanging baskets. EVERBLUE and JOHNBLUE are open-pollinated seedlings from seed collected in north-central Florida. They were selected at Castle Hayne, N. C. by G. J. Galletta and T. F. Cannon in 1972 and evaluated by G. J. Galletta, A. D. Draper, and J. R. Ballington from 1972-1979. EVERBLUE and JOHNBLUE have been tested at Castle Hayne and Raleigh, N. C. and are currently under test in Louisiana and Virginia. Plants of these cultivars did not survive the first winter at Beltsville, Maryland. They are recommended for trial throughout eastern North Carolina and the southeastern United States. The new foliage of EVERBLUE and JOHNBLUE is an attractive blue-green and the foliage takes on a light pinkish hue during the fall and winter. The stems also turn reddish in the fall and winter. The fruit is small, sweet, flavorful, light blue in color and will attract birds. The plant shape of these new cultivars is generally a low rounded mound. JOHNBLUE will eventually reach a mature height of 3 feet in eastern North Carolina, an EVERBLUE is somewhat lower reaching about 2 1/2 feet. Both EVERBLUE and JORNBLUE perform equally well as specimen plants or hedges. For best results outdoors additional organic matter will have to be added to the planting hole, as in azalea and camellia culture. These cultivars may be propagated by softwood stem or branched shoot cuttings under intermittent mist. For best rooting the cuttings should be taken from the stock plants when they are growing actively. Potted and hanging basket plants respond to long-day photoperiod treatments for producing luxuriant blue-green foliage and new shoots.

The following were donated by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 01/10/2001.

PI 638327. Vaccinium uliginosum L.
Wild. CVAC 1427. Pedigree - Collected from the wild in the Russian Federation.

The following were donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 01/18/2001.

PI 638328. Vaccinium hybrid
Cultivar. CVAC 1430. Pedigree - [US 51 (V. myrtilloides) x V. atrococcum colchicine doubled] x self.

PI 638329. Vaccinium hybrid
Cultivar. CVAC 1431. Pedigree - [(Tifblue x V. atrococcum #5) x (Fla 4B x Bluecrop)].

PI 638330. Vaccinium hybrid
Cultivar. CVAC 1432. Pedigree - [(Fla 4B x Knight) x (Cara's Choice)].

PI 638331. Vaccinium hybrid
Cultivar. CVAC 1433. Pedigree - {(Fla 4B x Knight) x [(Ashworth x FL 61-7)x (Bluecrop x Mich. 52-H)]}.

PI 638332. Vaccinium hybrid
Cultivar. CVAC 1434. Pedigree - {(Fla 4B x Knight) x [(Ashworth x FL 61-7)x (Bluecrop x Mich. 52-H)]}.

The following were donated by David Brazelton, Fall Creek Farm and Nursery, Inc., 39318 Jasper-Lowell Road Road, Lowell, Oregon 97452, United States. Received 03/14/2001.

PI 638333. Vaccinium hybrid
Cultivar. CVAC 1436. Pedigree - (Fla 4B x Bluecrop) x [(Ivanhoe x Earliblue) x Collins].

PI 638334. Vaccinium hybrid
Cultivar. CVAC 1437. Pedigree - [(Ivanhoe x Earliblue) x Collins] x [Tifblue x V. atrococcum #5].

PI 638335. Vaccinium hybrid
Cultivar. CVAC 1438. Pedigree - [(Ivanhoe x Earliblue) x Collins] x [Tifblue x V. atrococcum #5].

PI 638336. Vaccinium hybrid
Cultivar. CVAC 1440. Pedigree - [V. myrsinites x V. angustifolium] x (Tifblue x V. atrococcum #5.

PI 638337. Vaccinium hybrid
Cultivar. CVAC 1442. Pedigree - Knight x [(Ashworth x Fl 61-7) x (Bluecrop x Mich 52-H)].

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States;

Barbara Reed, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 06/29/2001.

PI 638338. Vaccinium cespitosum Michx.
Wild. KH 2001-02; CVAC 1448. Collected 06/25/2001 in Colorado, United States. Latitude 40° 23' 12" N. Longitude 105° 37' 52" W. Elevation 2932 m. Many Parks Curve, on U.S. 34 about 20 km west of junction with U.S. 36 in Estes Park, Colorado. Pedigree - Collected from the wild in Colorado.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Elliott Finn, 28984 Blazer Dr., Corvallis, Oregon 97330, United States; Barbara Fick, Oregon State University, Extension Service, Benton County, 1849 NW 9th Street, Corvallis, Oregon 97330, United States; Ian Finn, 28984 Blazer Dr., Corvallis, Oregon 97330, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 09/19/2001.

PI 638339. Vaccinium ovalifolium Sm.
Wild. Forlorn Lakes; CVAC 1449. Collected in Washington, United States. Elevation 1150 m. Around one of the Forlorn Lakes within the Forlorn Lakes campground, Gifford Pinchot National Forest. T6N R8E section 36 E 1/2 of southwest 1/4. Campground on Forest Service Road 6035. Collected 08/31/2001 in Washington, United States. Elevation 1150 m. Around one of the Forlorn Lakes within the Forlorn Lakes campground, Gifford Pinchot National Forest. T6N R8E section 36 E 1/2 of southwest 1/4. Campground on Forest Service Road 6035. Pedigree - Collected from the wild in Washington. Around one of Forlorn Lakes within area of Forlorn Lakes NF campground. Large (about 1.8 g) and very blue fruit. Plants were extremely productive. Plants were vigorous (to 1.4 m), and open with no obvious disease problems. Plants found within 1-25 m lakes edge. Moist soil. Associated species V membranaceum, Pseudotsuga menziesii, Tsuga sp.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Elliott Finn, 28984 Blazer Dr., Corvallis, Oregon 97330, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 09/19/2001.

PI 638340. Vaccinium deliciosum Piper
Wild. Cultus Creek; CVAC 1450. Collected 09/01/2001 in Washington, United States. Elevation 1500 m. Along National Forest trails 33, 179 and the Pacific Crest Trail. Indian Heavens Wilderness in the National Forest. T6N R8E sections 2, 11, 14 and 15. Pedigree - Collected from the wild in Washington. Large stands of V deliciosum can be found in this higher elevation lake, meadow, swamp ecosystem. While V deliciosum was often found in a band 1-5 m above where standing water might sit in the spring, it was also found on hillsides and along streams. Often stands as large as 1 ha were found. The fruit were large (~1.9 g), very blue, and very aromatic. Plants were vigorous (to 1 m) and often very

dense. The plants were extremely productive and picking was easy. Appeared to be a fairly constantly moist, not wet, environment.

Unknown source. Received 08/31/2001.

PI 638341. Vaccinium uliginosum L.
Wild. HVSC-002; CVAC 1451. Collected in Primorye, Russian Federation. Latitude 46° 33' 24" N. Longitude 134° 16' 7" E. Elevation 74 m. Area consisting of open, flat, poorly drained Sphagnum bog soil. Pedigree - Collected from the wild in Primorye, Russian Federation.

Unknown source. Received 08/31/2001.

PI 638342. Vaccinium vitis-idaea L.
Wild. HVSC-017; CVAC 1454. Collected in Primorye, Russian Federation. Latitude 44° 29' 41" N. Longitude 135° 23' 12" E. Elevation 673 m. Open exposure. Pedigree - Collected from the wild in Primorye, Russian Federation.

Unknown source. Received 08/31/2001.

PI 638343. Vaccinium uliginosum L.
Wild. HVSC-018; CVAC 1455. Collected in Primorye, Russian Federation. Latitude 44° 32' 49" N. Longitude 135° 33' 17" E. Elevation 211 m. Set in a flat poor drained sphagnum type bog. Pedigree - Collected from the wild in Primorye, Russain Federation.

Unknown source. Received 08/31/2001.

PI 638344. Vaccinium uliginosum L.
Wild. HVSC-028; CVAC 1457. Collected in Primorye, Russian Federation. Latitude 44° 41' 9" N. Longitude 135° 35' 31" E. Elevation 794 m. Located at the end of the road on a flat 80% exposed swamp with poor drainage in a sphagnum bog. Betula platyphylla is also present. Pedigree - Collected from the wild in Primorye, Russain Federation.

Unknown source. Received 08/31/2001.

PI 638345. Vaccinium uliginosum L.
Wild. HVSC-041; CVAC 1459. Collected in Primorye, Russian Federation. Latitude 45° 12' 55" N. Longitude 135° 41' 21" E. Elevation 549 m. Located at the swamp of the road to the SE in a poorly drained Sphagnum bog. Few poplars on the edge of swamp salix. Panicum, spruces, Pinus koreanus,and Pirea (pink flower) also present. Pedigree - Collected from the wild in Primorye, Russain Federation.

Unknown source. Received 08/31/2001.

PI 638346. Vaccinium uliginosum L.
Wild. HVSC-046; CVAC 1462. Collected in Khabarovsk, Russian Federation. Latitude 46° 37' 4" N. Longitude 134° 25' 25" E. Elevation 70 m.

Located in a poorly drained bog that is open with no over stay, with a white birch at the edge. Vaccinium oxycoccos, Sphagnum, Leather leaf are also present. Pedigree - Collected from the wild in Khabarovsk, Russain Federation.

Unknown source. Received 08/31/2001.

PI 638347. Vaccinium uliginosum L.
Wild. HVSC-047; CVAC 1463. Collected in Khabarovsk, Russian Federation. Latitude 46° 33' 24" N. Longitude 134° 16' 7" E. Elevation 74 m. Located on a flat open Sphagnum bog with poor drainage. Phragmites, Populus betula, Pinus, Cotton grass all present. Pedigree - Collected from the wild in Khabarovsk, Russain Federation.

Unknown source. Received 08/31/2001.

PI 638348. Vaccinium uliginosum L.
Wild. HVSC-051; CVAC 1467. Collected in Khabarovsk, Russian Federation. Latitude 46° 49' 55" N. Longitude 134° 31' 23" E. Elevation 99 m. 80% exposed on a flat bog, little leafs present. Pedigree - Collected from the wild in Khabarovsk, Russain Federation.

Unknown source. Received 08/31/2001.

PI 638349. Vaccinium oxycoccos L.
Wild. HVSC-057; CVAC 1468. Collected in Khabarovsk, Russian Federation. Latitude 48° 5' 33" N. Longitude 135° 8' 4" E. Elevation 84 m. Openly exposed, on a flat bog peat/sphagnum soil with poor, drainage, grass sphagnum, Equisetum, scattered Populous, Larch around edge (lady's thumb) Polyganum, Camiomile, Taraxicum, and dock present. Pedigree - Collected from the wild in Khabarovsk, Russain Federation.

Unknown source. Received 08/31/2001.

PI 638350. Vaccinium oxycoccos L.
Wild. HVSC-058; CVAC 1470. Collected in Khabarovsk, Russian Federation. Latitude 48° 5' 33" N. Longitude 135° 8' 7" E. Elevation 84 m. Open flat, poorly drained bog-sphagnum, grass sphagnum Equisetum, scattered Populous, Larch, Taraxauim, dock also present. Pedigree - Collected from the wild in Khabarovsk, Russain Federation.

Unknown source. Received 08/31/2001.

PI 638351. Vaccinium uliginosum L.
Wild. HVSC-059; CVAC 1472. Collected in Khabarovsk, Russian Federation. Latitude 48° 5' 33" N. Longitude 135° 8' 4" E. Elevation 84 m. Pedigree - Collected from the wild in Khabarovsk, Russain Federation.

Unknown source. Received 08/31/2001.

PI 638352. Vaccinium oxycoccos L.
Wild. HVSC-066; CVAC 1473. Collected in Khabarovsk, Russian Federation. Latitude 49° 0' 26" N. Longitude 136° 28' 18" E. Elevation 41 m. Gathered from a flat open poorly drained bog. Scattered Birch larch pink on edges of bog, Sphagnum, grasses, and Leather leaf present. Pedigree - Collected from the wild in Khabarovsk, Russain Federation.

Unknown source. Received 08/31/2001.

PI 638353. Vaccinium uliginosum L.
Wild. HVSC-087; CVAC 1476. Collected in Khabarovsk, Russian Federation. Latitude 49° 5' 36" N. Longitude 139° 21' 53" E. Elevation 730 m. 80% exposed flat poorly drained Sphagnum bog with Almus, Leather Leaf, European white birch and few larix present. Pedigree - Collected from the wild in Khabarovsk, Russain Federation.

Unknown source. Received 08/31/2001.

PI 638354. Vaccinium vitis-idaea L.
Wild. HVSC-096; CVAC 1482. Collected in Khabarovsk, Russian Federation. Latitude 49° 10' 53" N. Longitude 140° 19' 57" E. Elevation 16 m. 80% flat poorly drained sphagnum bog, Rubus chamaemorus, Empetrum nigrum, Vaccinium uliginosum, Larches, Vaccinium oxycoccos also present. Pedigree - Collected from the wild in Khabarovsk, Russain Federation.

Unknown source. Received 08/31/2001.

PI 638355. Vaccinium uliginosum L.
Wild. HVSC-097; CVAC 1483. Collected in Khabarovsk, Russian Federation. Latitude 49° 10' 53" N. Longitude 140° 19' 57" E. Elevation 16 m. 80% flat poorly drained Sphagnum bog, Rubus chamaemorus, Sundew, Empetrum, Vaccinium oxycoccos. Pedigree - Collected from the wild in Khabarovsk, Russain Federation.

Unknown source. Received 08/31/2001.

PI 638356. Vaccinium vitis-idaea L.
Wild. HVSC-104; CVAC 1485. Collected in Khabarovsk, Russian Federation. Latitude 49° 9' 41" N. Longitude 138° 56' 16" E. Elevation 367 m. Wetspot in the forest, med-poor drainage. Pedigree - Collected from the wild in Khabarovsk, Russain Federation.

Unknown source. Received 08/31/2001.

PI 638357. Vaccinium oxycoccos L.
Wild. HVSC-095; CVAC 1487. Collected in Khabarovsk, Russian Federation. Latitude 49° 10' 53" N. Longitude 140° 19' 57" E. Elevation 16 m. 80% flat poorly drained Sphagnum bog. Pedigree - Collected from the wild in Khabarovsk, Russain Federation.

Unknown source. Received 08/31/2001.

PI 638358. Vaccinium vitis-idaea L.
Wild. HVSC-020; CVAC 1488. Collected in Primorye, Russian Federation. Latitude 44° 40' 22" N. Longitude 135° 35' 11" E. Elevation 750 m. Pedigree - Collected from the wild in Primorye, Russain Federation.

The following were collected by Dan L. Barney, University of Idaho, Research and Extension Center, 2105 N. Boyer, Sandpoint, Idaho 83864-9454, United States. Received 02/26/2002.

PI 638359. Vaccinium cespitosum Michx.
Wild. CVAC 1489. Collected 08/24/2001 in Washington, United States. Latitude 46° 5' 41" N. Longitude 121° 46' 32" W. Elevation 1126 m. Sawtooth Berry Fields, Gifford Pinchot National Forest, Skamania County, Washington. Collected around Frog Lake at junction of Forest Road 24 and Forest Road 30. Pedigree - Collected from the wild in Washington.

PI 638360. Vaccinium oxycoccos L.
Wild. CVAC 1490. Collected 10/16/2001 in Washington, United States. Latitude 48° 27' 19" N. Longitude 116° 49' 33" W. Elevation 759 m. Idaho Department of Lands site at the south end of Chase Lake, the near southern tip of Priest Lake in Kaniksu National Forest, Bonner County, Idaho. From floating sphagnum peat mat. Pedigree - Collected from the wild in Washington. Received as Vaccinium oxycoccus.

PI 638361. Vaccinium oxycoccos L.
Wild. CVAC 1491. Collected 10/16/2001 in Washington, United States. Latitude 48° 28' 39" N. Longitude 116° 49' 32" W. Elevation 823 m. Collected from private property surrounding Lee Lake near the southern tip of Priest Lake in Kaniksu National Forest, Bonner County, Idaho. On sphagnum moss mats growing along shoreline. Pedigree - Collected from the wild in Washington. Received as Vaccinium oxycoccus.

The following were collected by John Rourke, Buffelskloff Private Nature Reserve, P.O. Box 710, Lydenburg, Transvaal 1120, South Africa; John E. Burrows, Buffelskloff Private Nature Reserve, P.O. Box 710, Lydenburg, Transvaal 1120, South Africa. Donated by Bengt Goran Andersson, Johns Hopkins University, 3400 North Charles Street, Baltimore, Maryland 21218, United States. Received 04/18/2002.

PI 638362. Vaccinium exul Bolus
CVAC 1492. Collected 03/2002 in Transvaal, South Africa. Latitude 25° 17' S. Longitude 30° 31' E. Elevation 1800 m. Buffelskloof Nature Reserve, Lydenburg District, Mpumalanga (Province of Eastern Transvaal.). High Forest, growing on rocky quartzite cliffs in montane grassland on SE aspect slopes. Pedigree - Collected from the wild in Transvaal, South Africa.

The following were collected by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 10/29/2002.

PI 638363. Vaccinium vitis-idaea L.
Wild. CVAC 1493. Collected 08/2002 in Khabarovsk, Russian Federation. Elevation 0 m. Burea River. Pedigree - Collected from Burea River in Khabarovsk, Russian Federation.

PI 638364. Vaccinium uliginosum L.
Wild. CVAC 1494. Collected 08/2002 in Amur, Russian Federation. Elevation 0 m. Selemia River. Pedigree - Collected from the wild Selemia River in Amur, Russian Federation.

PI 638365. Vaccinium uliginosum L.
Wild. CVAC 1495. Collected 08/2002 in Amur, Russian Federation. Elevation 0 m. Selemia River. Pedigree - Collected from the wild Selemia River in Amur, Russian Federation.

PI 638366. Vaccinium uliginosum L.
Wild. CVAC 1496. Collected 08/2002 in Amur, Russian Federation. Elevation 0 m. Selemia River. Pedigree - Collected from the wild Selemia River in Amur, Russian Federation.

PI 638367. Vaccinium uliginosum L.
Wild. CVAC 1497. Collected 08/2002 in Khabarovsk, Russian Federation. Elevation 0 m. Nimelen River. Pedigree - Collected from the wild at Nimelen River in Khabarovsk, Russian Federation.

PI 638368. Vaccinium oxycoccos L.
Wild. CVAC 1498. Collected 08/2002 in Khabarovsk, Russian Federation. Elevation 0 m. Nimelen River. Pedigree - Collected from the wild at Nimelen River in Khabarovsk, Russian Federation.

PI 638369. Vaccinium vitis-idaea L.
Wild. CVAC 1499. Collected 08/2002 in Khabarovsk, Russian Federation. Elevation 0 m. Nimelen River. Pedigree - Collected from the wild at Nimelen River in Khabarovsk, Russian Federation.

PI 638370. Vaccinium ovalifolium Sm.
Wild. HVSC-127; CVAC 1500; V. ovalifolium HVSC-127 Sakhalin. Collected in Sakhalin, Russian Federation. Elevation 0 m. Yasnoe vicinity, Sakhalin Island. Collected 2001 in Sakhalin, Russian Federation. Elevation 0 m. Yasnoe vicinity, Sakhalin Island. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638371. Vaccinium sp.
Wild. HVSC-128; CVAC 1501; V. sp. HVSC-128 Sakhalin Island. Collected in Sakhalin, Russian Federation. Elevation 0 m. Sakhalinsky vicinity, Aleksandrovsk-Sakhalinsky, Sakhalin Island. Collected 2001 in Sakhalin, Russian Federation. Elevation 0 m. Sakhalinsky vicinity, Aleksandrovsk-Sakhalinsky, Sakhalin Island. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638372. Vaccinium smallii A. Gray
Wild. HVSC-129; CVAC 1502; V. smallii HVSC-129 Sakhalin. Collected in Sakhalin, Russian Federation. Elevation 0 m. Prigorodnoe vicinity, Sakhalin Island. Collected 2001 in Sakhalin, Russian Federation. Elevation 0 m. Prigorodnoe vicinity, Sakhalin Island. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

The following were collected by Sam P. Vander Kloet, Acadia University, Biology Department, Wolfville, Nova Scotia B0P 1X0, Canada. Received 12/07/2002.

PI 638373. Vaccinium myrtoides (Blume) Miq.
Wild. CVAC 1503. Collected in Luzon, Philippines. Elevation 0 m. Mt. Pulog, Luzon. Collected 08/23/2002 in Luzon, Philippines. Elevation 0 m. Mt. Pulog, Luzon. Pedigree - Collected from the wild in the Philippines.

The following were collected by Dan L. Barney, University of Idaho, Research and Extension Center, 2105 N. Boyer, Sandpoint, Idaho 83864-9454, United States. Received 01/20/2003.

PI 638374. Vaccinium cespitosum Michx.
Wild. CVAC 1504. Collected in Idaho, United States. Latitude 48° 37' 50" N. Longitude 116° 57' 7" W. Elevation 800 m. Kaniksu National Forest. Bonner County, Idaho Several hundred yards south of Nordman, Idaho At recent logging site on closed Forest Road 308. Extensive V. caespitosum colony with scattered V. membranaceum. V. caespitosum in full sun along roadside under edge of mixed conifer canopy Soil had volcanic ash layers and sandy soil under duff layer. Collected 07/29/2002 in Idaho, United States. Latitude 48° 37' 50" N. Longitude 116° 57' 7" W. Elevation 800 m. Kaniksu National Forest. Bonner County, Idaho. Several hundred yards south of Nordman, Idaho. At recent logging site on closed Forest Road 308. Extensive V. caespitosum colony with scattered V. membranaceum. V. caespitosum in full sun along roadside under edge of mixed conifer canopy Soil had volcanic ash layers and sandy soil under duff layer. Pedigree - Collected from the wild in Idaho.

PI 638375. Vaccinium cespitosum Michx.
Wild. CVAC 1505. Collected in Idaho, United States. Latitude 44° 39' 11" N. Longitude 115° 39' 40" W. Elevation 1603 m. Boise National Forest. Valley County, Idaho Near Warm Lake, 26 miles east of Cascade, Idaho. Beside an unnamed stream running from the northwest end of Warm Lake about 200 m downstream from bridge over Forest road 426. Vaccinium caespitosum dominated the understory under canopy of Pseudotsuga menziesii and Abies lasiocarpa. Collected 08/11/2002 in Idaho, United States. Latitude 44° 39' 11" N. Longitude 115° 39' 40" W. Elevation 1603 m. Boise National Forest. Valley County, Idaho Near Warm Lake, 26 miles east of Cascade, Idaho. Beside an unnamed stream running from the northwest end of Warm Lake about 200 m downstream from bridge over Forest road 426. Vaccinium caespitosum dominated the understory under canopy of Pseudotsuga menziesii and Abies lasiocarpa. Pedigree - Collected from the wild in Idaho.

PI 638376. Vaccinium scoparium Leiberg
Wild. CVAC 1506. Collected in Wyoming, United States. Latitude 42° 38' 25" N. Longitude 108° 52' 31" W. Elevation 2785 m. Shoshone National Forest. Fremont County, Wyoming Collected from along Louie Lake Rd. (Forest Rd 300) 11 miles from Sinks Canyon Road and 16 miles southwest of Lander, WY. V. scoparium dominant under Pinus contorta along Canyon Creek. Collected 08/08/2002 in Wyoming, United States. Latitude 42° 38' 25" N. Longitude 108° 52' 31" W. Elevation 2785 m. Shoshone National Forest. Fremont County, Wyoming Collected from along Louie Lake Rd. (Forest Rd 300) 11 miles from Sinks Canyon Road and

16 miles southwest of Lander, WY. V. scoparium dominant under Pinus contorta along Canyon Creek. Pedigree - Collected from the wild in Wyoming.

PI 638377. Vaccinium scoparium Leiberg
Wild. CVAC 1507. Collected in Idaho, United States. Latitude 44° 12' 18" N. Longitude 111° 15' 6" W. Elevation 1692 m. Targhee National Forest, Fremont County, Idaho From Warm River, 14 miles NE of Ashton, Idaho at end of Warm River Hatchery Road (Forest Road 154). Collected 100m upstream on slope above west bank. V. scoparium abundant under Pinus contorta. Collected 08/09/2002 in Idaho, United States. Latitude 44° 12' 18" N. Longitude 111° 15' 6" W. Elevation 1692 m. Targhee National Forest, Fremont County, Idaho From Warm River, 14 miles NE of Ashton, Idaho at end of Warm River Hatchery Road (Forest Road 154). Collected 100m upstream on slope above west bank. V. scoparium abundant under Pinus contorta. Pedigree - Collected from the wild in Idaho.

PI 638378. Vaccinium uliginosum L.
Wild. CVAC 1508. Collected in Wyoming, United States. Latitude 42° 36' 31" N. Longitude 108° 51' 16" W. Elevation 2576 m. Shoshone National Forest, Fremont County, Wyoming From Little Popo Agie River downstream of bridge on Louie Lake Road (Forest Road 308) 16 miles SSW of Lander, WY. V. uliginosum abundant on river banks and under Pinus albicaulis and P. contorta at least 100 m from the river V. uliginosum exhibited great phenotypic diversity in plant size and growth habits, yields, and fruit characters. Collected 08/08/2002 in Wyoming, United States. Latitude 42° 36' 31" N. Longitude 108° 51' 16" W. Elevation 2576 m. Shoshone National Forest, Fremont County, Wyoming. From Little Popo Agie River downstream of bridge on Louie Lake Road (Forest Road 308) 16 miles SSW of Lander, WY. V. uliginosum abundant on river banks and under Pinus albicaulis and P. contorta at least 100 m from the river V. uliginosum exhibited great phenotypic diversity in plant size and growth habits, yields, and fruit characters. Pedigree - Collected from the wild in Wyoming.

The following were donated by Susan D. Rooks, North Carolina State University, Department of Horticultural Science, Horticultural Crop Research Station, Castle Hayne, North Carolina 28429, United States; Finch Blueberry Nursery, P.O. Box 699, Bailey, North Carolina 27807, United States. Received 02/25/2003.

PI 638379. Vaccinium corymbosum L.
Cultivar. "Arlen"; G-600; CVAC 1514. Pedigree - G-144 x FL4-76 A complex mixture of V. corymbosum, V. asheii and V.darrowii. Arlen- A self-fruitful, late-season southern highbush blueberry. Origin; from the cross G-144 x FL4-76 made by Arlen Draper in 1976. Full sibling to Ozarkblue and Summit. Tested as G-600. Introduced in 2001 by North Carolina State University and USDA. Fruit: Recommended for hand harvest. Berry larger than Croatan and Legacy, excellent color and flavor; picking scar and firmness superior to Croatan and equal to Legacy. Plant: flowers about Croatan season; ripens two or three weeks after Croatan and a few days after Summit in southeastern North Carlina. Consistent production. Plant upright with good vigor. Resistant to stem blight and anthracnose (Colletotrichum) fruit rot. Fruit stores well.

The following were donated by Mark Ehlenfeldt, USDA, ARS, Rutgers Blueberry and Cranberry, Research Center, Chatsworth, New Jersey 08019, United States. Received 03/06/2003.

PI 638380. Vaccinium angustifolium Aiton
Cultivar. "Fundy"; 69-1; CVAC 1518. Pedigree - Open pollinated seedling of Augusta. Fundy - An extremely vigorous lowbush blueberry with large fruit. Origin: open-pollinated seedling of Augusta selected in 1969 at Kentville Research Centre, Nova Scotia, Canada. Tested in Eastern Canada under the number 69-1 and released in 1988. Fruit: ovate with a heavy bloom. Berry very large, averaging 0.72 g per berry, with the largest berries exceeding 1 g. Clusters of berries are held on upright stems, making hand harvesting efficient. The pedicel scar is medium and the calyx end is closed. Fresh flavor is good but not as intense as for Cumberland. Berries mature uniformly within the cluster in early midseason. about 4 days after Brunswick and 4 days before Blomidon. Plant: extremely vigorous, with strong, erect sprouts reachin up to 40 cm in height. Leaves averate 29 mm x 15 mm and are slightly glossy. Flowers in the middle of the bloom period with white corollas that are 6 mm long. Pollen production is good, but Fundy is self-incompatible. Roots readily from softwood cuttings.

The following were donated by Nick Vorsa, Rutgers University, Blueberry & Cranberry, Research Station, Chatsworth, New Jersey 08109, United States. Received 03/06/2003.

PI 638381. Vaccinium boreale I. V. Hall & Aalders
Wild. CVAC 1520. Pedigree - selection of V. fuscatum.

PI 638382. Vaccinium darrowii Camp
Wild. CVAC 1521. Pedigree - selection of V. darrowii.

PI 638383. Vaccinium elliottii Chapm.
Wild. CVAC 1522. Pedigree - selection of wild V. elliottii.

PI 638384. Vaccinium myrtilloides Michx.
Wild. CVAC 1523. Pedigree - selection of wild V. myrtilloides.

PI 638385. Vaccinium myrtilloides Michx.
Wild. CVAC 1524. Pedigree - selection of wild V. myrtilloides.

PI 638386. Vaccinium tenellum Aiton
Wild. CVAC 1525. Pedigree - selection of wild V. tenellum.

The following were collected by Douglas Cook, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/30/2002.

PI 638387. Vaccinium sp.
Wild. Hosmer Lake blueberry; DC2002-2; CVAC 1526. Collected 09/03/2002 in Oregon, United States. Latitude 43° 58' 13" N. Longitude 121° 46' 56" W. Elevation 1525 m. Hosmer Lake, off Cascade Lakes Highway, southwest of Bend, to the east of Elk Lake. Along northwest shore, where vegetation reaches 100m east into lake. Old bog with the soil mostly

above waterline, with grasses and a few pine and fir on the highest spots. Pedigree - Collected from the wild in Oregon.

The following were donated by Dave Stout, USDA, ARS, Washington State University, Regional Plant introduction Station, Pullman, Washington 99164-6402, United States. Received 11/07/2003.

PI 638388. Vaccinium membranaceum Douglas ex Torr.
Wild. V. membranaceum 'Albino OP'; CVAC 1528.

The following were donated by Baldassare Mineo, Siskiyou Rare Plant Nursery, 2825 Cummings Road, Medford, Oregon 97501, United States. Received 11/18/2003.

PI 638389. Vaccinium varingifolium (Blume) Miq.
Cultivated. CVAC 1529. Collected in Java, Indonesia.

The following were collected by Douglas Cook, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/03/2002.

PI 638390. Vaccinium sp.
Wild. Hosmer Lake blueberry SD; DC2002-3; CVAC 1533. Collected 09/01/2002 in Oregon, United States. Latitude 43° 58' 13" N. Longitude 121° 46' 56" W. Elevation 1525 m. Hosmer Lake, off Cascade Lakes Highway, southwest of Bend, to the east of Elk Lake. Along northwest shore, where vegetation reaches 100m east into lake. Old bog with the soil mostly above waterline, with grasses and a few pine and fir on the highest spots. Pedigree - Collected from the wild in Oregon.

The following were collected by Pavel Cherbukin, Vavilov Research Institute, Far Eastern Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation; Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation; Luda Popova, Vavilov Research Institute, Far Eastern Experiment Station, Vavilov Road, House #9, Vladivostok, Primorye 690025, Russian Federation. Donated by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 01/29/2004.

PI 638391. Vaccinium smallii A. Gray
Wild. AS-03-058; CVAC 1534. Collected 08/17/2003 in Sakhalin, Russian Federation. Latitude 44° 47' 50" N. Longitude 147° 8' 31" E. Elevation 16 m. Sakhalin Island, Korsakovskiy Region, Lesnoy Cape, 4km from Lesnoe village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638392. Vaccinium smallii A. Gray
Wild. AS-03-059; CVAC 1535. Collected 08/18/2003 in Sakhalin, Russian Federation. Latitude 49° 6' 59" N. Longitude 142° 51' 28" E. Elevation 133 m. Sakhalin Island, Dolinskiy Region, on the east slope of a rock quarry 5km from Vzmorie village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638393. Vaccinium smallii A. Gray
Wild. AS-03-060; CVAC 1536. Collected 08/18/2003 in Sakhalin, Russian Federation. Latitude 49° 6' 59" N. Longitude 142° 51' 28" E. Elevation 133 m. Sakhalin Island, Dolinskiy Region, on the east slope of a rock quarry 5km from Vzmorie village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638394. Vaccinium smallii A. Gray
Wild. AS-03-061; CVAC 1537. Collected 08/18/2003 in Sakhalin, Russian Federation. Latitude 48° 11' 37" N. Longitude 142° 35' 30" E. Elevation 50 m. Sakhalin Island, Makarovskiy Region, on the foot of the coast slope of Uyanka Cove, 10km to the south of Vostochnyi village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638395. Vaccinium smallii A. Gray
Wild. AS-03-062; CVAC 1538. Collected 08/18/2003 in Sakhalin, Russian Federation. Latitude 48° 11' 37" N. Longitude 142° 35' 30" E. Elevation 50 m. Sakhalin Island, Makarovskiy Region, on the foot of the coast slope of Uyanka Cove, 10km to the south of Vostochnyi village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638396. Vaccinium smallii A. Gray
Wild. AS-03-063; CVAC 1539. Collected 09/03/2003 in Sakhalin, Russian Federation. Latitude 48° 0' 34" N. Longitude 142° 30' 2" E. Elevation 97 m. Sakhalin Island, Makarovskiy Region, southeast slope of the hill 3km to the south of Tikhaya village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638397. Vaccinium smallii A. Gray
Wild. AS-03-064; CVAC 1540. Collected 09/04/2003 in Sakhalin, Russian Federation. Latitude 47° 58' 45" N. Longitude 142° 19' 23" E. Elevation 100 m. Sakhalin Island, Tomarinskiy Region, on the south slope of Golovataya Hill in the basin of the Il'inka River 8km from Il'inskiy village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638398. Vaccinium smallii A. Gray
Wild. AS-03-065; CVAC 1541. Collected 09/02/2003 in Sakhalin, Russian Federation. Latitude 49° 6' 59" N. Longitude 142° 40' 28" E. Elevation 400 m. Sakhalin Island, Poronayskiy Region, Gastello village, on the north slope of the Voskovaya River, 16km above Gastello Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638399. Vaccinium smallii A. Gray
Wild. AS-03-066; CVAC 1542. Collected 09/02/2003 in Sakhalin, Russian Federation. Latitude 50° 11' 9" N. Longitude 142° 33' 13" E. Elevation 250 m. Sakhalin Island, Smirnykhovskiy Region, Onor village, on the north slope of the Onorka River. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638400. Vaccinium smallii A. Gray
Wild. AS-03-067; CVAC 1543. Collected 09/02/2003 in Sakhalin, Russian Federation. Latitude 50° 11' 8" N. Longitude 142° 33' E. Elevation 250 m. Sakhalin Island, Smirnykhovskiy Region, Onor village, on the north slope of the Onorka River. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638401. Vaccinium smallii A. Gray
Wild. AS-03-068; CVAC 1544. Collected 08/23/2003 in Sakhalin, Russian Federation. Latitude 51° 19' 10" N. Longitude 142° 30' 47" E. Elevation 86 m. Sakhalin Island, Tymovckiy Region, upper reaches of the Bubnovka River, 10km from Ulva village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638402. Vaccinium smallii A. Gray
Wild. AS-03-069; CVAC 1545. Collected 09/01/2003 in Sakhalin, Russian Federation. Latitude 51° 4' 32" N. Longitude 142° 16' 18" E. Elevation 111 m. Sakhalin Island, Aleksandrovsk-Sakhalinskiy Region, 15km on the Aleksandrovsk-Sakhalinsk-Mgachi Road. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638403. Vaccinium ovalifolium Sm.
Wild. AS-03-070; CVAC 1546. Collected 08/05/2003 in Sakhalin, Russian Federation. Elevation 50 m. Iturup Island, at the foot of Atsonupuri Volcano. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638404. Vaccinium ovalifolium Sm.
Wild. AS-03-071; CVAC 1547. Collected 07/27/2003 in Sakhalin, Russian Federation. Latitude 46° 57' 37" N. Longitude 142° 46' 16" E. Elevation 220 m. Sakhalin Island, on the outskirts of Ujno-Sakhalinsk city, on the southwest slope of the Bol'shevik Mountain. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638405. Vaccinium ovalifolium Sm.
Wild. AS-03-072; CVAC 1548. Collected 08/17/2003 in Sakhalin, Russian Federation. Latitude 44° 47' 50" N. Longitude 142° 8' 31" E. Elevation 16 m. Sakhalin Island, Korsakovskiy Region, the Lesnoy Cape, 4km from Lesnoe village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638406. Vaccinium ovalifolium Sm.
Wild. AS-03-073; CVAC 1549. Collected 08/18/2003 in Sakhalin, Russian Federation. Latitude 49° 6' 58" N. Longitude 142° 51' 28" E. Elevation 133 m. Sakhalin Island, Dolinskiy Region, on the east slope of a rock quarry 5km from Vzmorie village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638407. Vaccinium ovalifolium Sm.
Wild. AS-03-074; CVAC 1550. Collected 08/18/2003 in Sakhalin, Russian Federation. Latitude 49° 6' 58" N. Longitude 142° 51' 28" E. Elevation 133 m. Sakhalin Island, Dolinskiy Region, on the east slope of a rock quarry 5km from Vzmorie village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638408. Vaccinium ovalifolium Sm.
Wild. AS-03-075; CVAC 1551. Collected 08/18/2003 in Sakhalin, Russian Federation. Latitude 48° 11' 37" N. Longitude 142° 35' 29" E. Elevation 50 m. Sakhalin Island, Makarovskiy Region, at the foot of the coastal slope of Uyanka Cove, 10km south of Vostochnyi village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638409. Vaccinium ovalifolium Sm.
Wild. AS-03-076; CVAC 1552. Collected 08/19/2003 in Sakhalin, Russian Federation. Latitude 49° 6' 58" N. Longitude 142° 51' 28" E. Elevation 65 m. Sakhalin Island, Poronaiskii Region, on the north slope of the Gastellovka River 15km above Gastello village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638410. Vaccinium ovalifolium Sm.
Wild. AS-03-077; CVAC 1553. Collected 08/19/2003 in Sakhalin, Russian Federation. Latitude 49° 6' 58" N. Longitude 142° 51' 28" E. Elevation 65 m. Sakhalin Island, Poronaiskii Region, on the north slope of the Gastellovka River 15km above Gastello village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638411. Vaccinium ovalifolium Sm.
Wild. AS-03-078; CVAC 1554. Collected 09/02/2003 in Sakhalin, Russian Federation. Latitude 49° 6' 58" N. Longitude 142° 40' 28" E. Elevation 400 m. Sakhalin Island, Poronayskiy Region, Gastello village, on the north slope of the Voskovaya River, 16 km above Gastello Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638412. Vaccinium ovalifolium Sm.
Wild. AS-03-079; CVAC 1555. Collected 08/20/2003 in Sakhalin, Russian Federation. Latitude 50° 1' 14" N. Longitude 143° 24' 42" E. Elevation 715 m. Sakhalin Island, Smirnykhovskyi Region, on the northeast slope of Liven'(Dounpour) Mountain, 16km from Pervomaisk village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638413. Vaccinium ovalifolium Sm.
Wild. AS-03-080; CVAC 1556. Collected 08/20/2003 in Sakhalin, Russian Federation. Latitude 50° 1' 5" N. Longitude 143° 29' 6" E. Elevation 398 m. Sakhalin Island, left side of the Pilenga slope 22km from Pervomaisk village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638414. Vaccinium ovalifolium Sm.
Wild. AS-03-081; CVAC 1557. Collected 08/20/2003 in Sakhalin, Russian Federation. Latitude 50° 12' 46" N. Longitude 143° 43' 16" E. Elevation 122 m. Sakhalin Island, Smirnykhovskiy Region, east slope of Zimniy Spring 43km inland from Pervomaisk village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638415. Vaccinium ovalifolium Sm.
Wild. AS-03-082; CVAC 1558. Collected 08/21/2003 in Sakhalin, Russian Federation. Elevation 0 m. Sakhalin Island, Smirnykhovskiy Region, on the north side of the Langeri River 10km from Pogranichnoe village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638416. Vaccinium ovalifolium Sm.
Wild. AS-03-083; CVAC 1559. Collected 08/21/2003 in Sakhalin, Russian Federation. Latitude 50° 20' 51" N. Longitude 143° 46' 11" E. Elevation 90 m. Sakhalin Island, Smirnykhovskiy Region, on the sea coast 5km to the south of Pogranichnaya village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638417. *Vaccinium ovalifolium* Sm.
Wild. AS-03-084; CVAC 1560. Collected 08/24/2003 in Sakhalin, Russian Federation. Latitude 51° 16' 17" N. Longitude 143° 6' 33" E. Elevation 141 m. Sakhalin Island, Noglikskiy Region, in the basin of Dvoinoy Spring 50km to the east of Argi-Pagi village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638418. *Vaccinium ovalifolium* Sm.
Wild. AS-03-084B; CVAC 1561. Collected 08/26/2003 in Sakhalin, Russian Federation. Latitude 51° 16' 5" N. Longitude 143° 6' 33" E. Elevation 141 m. Sakhalin Island, Noglikskiy Region, in the basin of Dvoinoy Spring 50km to the east of Argi-Pagi village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638419. *Vaccinium ovalifolium* Sm.
Wild. AS-03-085; CVAC 1562. Collected 09/01/2003 in Sakhalin, Russian Federation. Latitude 50° 54' 26" N. Longitude 142° 21' 26" E. Elevation 198 m. Sakhalin Island, Tymovskiy region, 50km from Tymovskoe city by Tymovskiy-Aleksandrovsk-Sakhalinsk Road. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638420. *Vaccinium ovalifolium* Sm.
Wild. AS-03-086; CVAC 1563. Collected 09/01/2003 in Sakhalin, Russian Federation. Latitude 51° 4' 32" N. Longitude 142° 16' 18" E. Elevation 111 m. Sakhalin Island, Aleksandrovsk-Sakhalinskiy Region, 15km inland on the Aleksandrovsk-Sakhalinsk-Mgachi Road. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638421. *Vaccinium ovalifolium* Sm.
Wild. AS-03-087; CVAC 1564. Collected 08/23/2003 in Sakhalin, Russian Federation. Latitude 51° 2' 22" N. Longitude 142° 51' 52" E. Elevation 182 m. Sakhalin Island, Tymovskii Region, in the basin of a spring on the Pilenga River, 16km from Molodejnoe village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638422. *Vaccinium ovalifolium* Sm.
Wild. AS-03-088; CVAC 1565. Collected 08/23/2003 in Sakhalin, Russian Federation. Elevation 190 m. Sakhalin Island, 19km from Molodejnoe village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638423. *Vaccinium ovalifolium* Sm.
Wild. AS-03-089; CVAC 1566. Collected 08/27/2003 in Sakhalin, Russian Federation. Latitude 53° 54' 56" N. Longitude 142° 44' 14" E. Elevation 28 m. Sakhalin Island, Okhinskiy Region, on marshland 40km north of Okha city. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638424. *Vaccinium ovalifolium* Sm.
Wild. AS-03-090; CVAC 1567. Collected 08/27/2003 in Sakhalin, Russian Federation. Latitude 53° 2' 47" N. Longitude 142° 40' 15" E. Elevation 197 m. Sakhalin Island, Okhinskiy Region, northwest slope of Three Brothers Mountain on the Shmidta Peninsula, 56km north of Okha city. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638425. Vaccinium ovalifolium Sm.
Wild. AS-03-091; CVAC 1568. Collected 08/28/2003 in Sakhalin, Russian Federation. Latitude 53° 2' 47" N. Longitude 142° 40' 15" E. Elevation 197 m. Sakhalin Island, Okhinskiy Region, northwest slope of Three Brothers Mountain on the Shmidta Peninsula, 56km north of Okha city. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638426. Vaccinium praestans Lamb.
Wild. AS-03-092; CVAC 1569. Collected 08/06/2003 in Sakhalin, Russian Federation. Elevation 5 m. Iturup Island, the foot of Atsonupuri Volcano, north seaward bay. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638427. Vaccinium praestans Lamb.
Wild. AS-03-093; CVAC 1570. Collected 08/18/2003 in Sakhalin, Russian Federation. Latitude 49° 6' 58" N. Longitude 142° 51' 28" E. Elevation 133 m. Sakhalin Island, Dolinskiy Region, the east slope of a rock quarry 5km from Vzmorie village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638428. Vaccinium praestans Lamb.
Wild. AS-03-094; CVAC 1571. Collected 09/04/2003 in Sakhalin, Russian Federation. Latitude 47° 58' 44" N. Longitude 142° 19' 22" E. Elevation 100 m. Sakhalin Island, Tomarinskiy Region, on the south slope of Golovataya Hill in Il'inka River Basin, 8km from Il'inskiy village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638429. Vaccinium praestans Lamb.
Wild. AS-03-095; CVAC 1572. Collected 09/03/2003 in Sakhalin, Russian Federation. Latitude 48° 0' 33" N. Longitude 142° 30' 1" E. Elevation 97 m. Sakhalin Island, Makarovskiy Region, southeast slope of a hill 3km south of Tikhaya village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638430. Vaccinium praestans Lamb.
Wild. AS-03-096; CVAC 1573. Collected 08/18/2003 in Sakhalin, Russian Federation. Latitude 48° 11' 37" N. Longitude 142° 35' 29" E. Elevation 50 m. Sakhalin Island, Makarovskiy Region, coastal slope, 7km south of Vostochnyi village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638431. Vaccinium praestans Lamb.
Wild. AS-03-097; CVAC 1574. Collected 08/20/2003 in Sakhalin, Russian Federation. Elevation 0 m. Sakhalin Island, Makarovskiy Region, the foot of coastal slope of Uyanka Cove, 10km south of Vostochnyi village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638432. Vaccinium praestans Lamb.
Wild. AS-03-098; CVAC 1575. Collected 08/19/2003 in Sakhalin, Russian Federation. Latitude 49° 6' 58" N. Longitude 142° 51' 28" E. Elevation 75 m. Sakhalin Island, Poronaiskii Region, on the north slope Gastellovka River 15km above Gastello village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638433. Vaccinium praestans Lamb.
Wild. AS-03-099; CVAC 1576. Collected 09/02/2003 in Sakhalin, Russian Federation. Elevation 89 m. Sakhalin Island, Poronaiskii Region, on the left slope of the Gastellovka River, 20km above Gastello village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638434. Vaccinium praestans Lamb.
Wild. AS-03-100; CVAC 1577. Collected 08/20/2003 in Sakhalin, Russian Federation. Latitude 50° 12' 46" N. Longitude 143° 43' 16" E. Elevation 122 m. Sakhalin Island, Smirnykhovskiy Region, east slope of Zimniy Spring, inland 43km from Pervomaisk village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638435. Vaccinium praestans Lamb.
Wild. AS-03-100A; CVAC 1578. Collected 08/21/2003 in Sakhalin, Russian Federation. Latitude 50° 20' 51" N. Longitude 143° 46' 11" E. Elevation 90 m. Sakhalin Island, Smirnykhovskiy Region, from the sea coast go inland 5km to area south of Pogranichnaya village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638436. Vaccinium praestans Lamb.
Wild. AS-03-101; CVAC 1579. Collected 08/23/2003 in Sakhalin, Russian Federation. Latitude 51° 2' 22" N. Longitude 142° 51' 52" E. Elevation 182 m. Sakhalin Island, Tymovskiy Region, at the basin of spring on the Pilenga River, 16km from Molodejnoe village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638437. Vaccinium praestans Lamb.
Wild. AS-03-102; CVAC 1580. Collected 09/01/2003 in Sakhalin, Russian Federation. Latitude 51° 4' 32" N. Longitude 142° 16' 18" E. Elevation 111 m. Sakhalin Island, Aleksandrovsk-Sakhalinskiy Region, 15km on the Aleksandrovsk-Sakhalinsk-Mgachi Road. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638438. Vaccinium praestans Lamb.
Wild. AS-03-103; CVAC 1581. Collected 08/24/2003 in Sakhalin, Russian Federation. Latitude 51° 16' 17" N. Longitude 143° 6' 33" E. Elevation 141 m. Sakhalin Island, Noglikskiy Region, at the basin of Dvoinoy Spring, inland 50km east of Argi-Pagi village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638439. Vaccinium praestans Lamb.
Wild. AS-03-104; CVAC 1582. Collected 08/24/2003 in Sakhalin, Russian Federation. Elevation 0 m. Sakhalin Island, Noglikskiy Region, in the Dvoinoy Spring basin, inland 46km east of Argi-Pagi village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638440. Vaccinium praestans Lamb.
Wild. AS-03-105; CVAC 1583. Collected 08/26/2003 in Sakhalin, Russian Federation. Latitude 52° 30' 24" N. Longitude 143° 5' 12" E. Elevation 63 m. Sakhalin Island, Noglinskii Region, at the basin spring of Big Goronay River, 5km from Goromay Station. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638441. Vaccinium praestans Lamb.
Wild. AS-03-106; CVAC 1584. Collected 08/27/2003 in Sakhalin, Russian Federation. Latitude 53° 2' 47" N. Longitude 142° 40' 15" E.

Elevation 197 m. Sakhalin Island, Okhinskiy Region, a northwest slope of Three Brothers Mountain on the Shmidta Peninsula 56km north of Okha city. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638442. Vaccinium praestans Lamb.
Wild. AS-03-107; CVAC 1585. Collected 08/17/2003 in Sakhalin, Russian Federation. Latitude 44° 47' 50" N. Longitude 147° 8' 31" E. Elevation 15 m. Sakhalin Island, Korsakovskiy Region, on the south side of Izmenchivoe Lake, 5km before Okhotskoe village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638443. Vaccinium uliginosum L.
Wild. AS-03-108; CVAC 1586. Collected 08/21/2003 in Sakhalin, Russian Federation. Latitude 49° 56' 11" N. Longitude 143° 2' 52" E. Elevation 166 m. Sakhalin Island, Smirnykhovskiy Region, 5 km from Pervomaisk village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638444. Vaccinium uliginosum L.
Wild. AS-03-109; CVAC 1587. Collected 08/20/2003 in Sakhalin, Russian Federation. Latitude 49° 55' 54" N. Longitude 143° 17' 25" E. Elevation 186 m. Sakhalin Island, Smirnykhovskiy Region, 5 km from Pervomaisk Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638445. Vaccinium uliginosum L.
Wild. AS-03-110; CVAC 1588. Collected 08/21/2003 in Sakhalin, Russian Federation. Elevation 0 m. Sakhalin Island, on the Selivanikha River basin, 5 km to the north of Pogranichnoe village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638446. Vaccinium uliginosum L.
Wild. AS-03-111; CVAC 1589. Collected 08/22/2003 in Sakhalin, Russian Federation. Latitude 50° 10' 58" N. Longitude 142° 44' 48" E. Elevation 147 m. Sakhalin Island, Smirnykhovskiy Region, on the outskirts of an old airfield 5 km from Onore Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638447. Vaccinium uliginosum L.
Wild. AS-03-112; CVAC 1590. Collected 08/23/2003 in Sakhalin, Russian Federation. Latitude 51° 19' 10" N. Longitude 142° 39' 47" E. Elevation 50 m. Sakhalin Island, Tymovskii Region, on the marshland at the outskirts of the old Ul'va Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638448. Vaccinium uliginosum L.
Wild. AS-03-113; CVAC 1591. Collected 08/23/2003 in Sakhalin, Russian Federation. Latitude 51° 19' 10" N. Longitude 142° 30' 7" E. Elevation 98 m. Sakhalin Island, Tymovskii Region, on the marshland in the upper reaches of the Aleksandrovka River, 16 km from Ul'va village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638449. Vaccinium uliginosum L.
Wild. AS-03-114; CVAC 1592. Collected 08/31/2003 in Sakhalin, Russian Federation. Latitude 51° 44' 35" N. Longitude 143° 4' 54" E. Elevation 56 m. Sakhalin Island, Tymovskii Region, on the marshland 12

km from Nysh Village on the Nysh-Pogibi Road. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638450. Vaccinium uliginosum L.
Wild. AS-03-115; CVAC 1593. Collected 08/25/2003 in Sakhalin, Russian Federation. Latitude 52° 6' 33" N. Longitude 142° 59' 20" E. Elevation 17 m. Sakhalin Island, Boglikskiy Region, on the marshland in the Dagi River Basin, 4 km from the Nogliki-Dagi highway. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638451. Vaccinium uliginosum L.
Wild. AS-03-116; CVAC 1594. Collected 08/25/2003 in Sakhalin, Russian Federation. Latitude 52° 20' 58" N. Longitude 142° 55' 22" E. Elevation 22 m. Sakhalin Island, Noglikskiy Region, on the marshland in the Krujka River Basin, 6 km west of Val Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638452. Vaccinium uliginosum L.
Wild. AS-03-117; CVAC 1595. Collected 08/26/2003 in Sakhalin, Russian Federation. Latitude 52° 30' 24" N. Longitude 143° 5' 12" E. Elevation 63 m. Sakhalin Island, Noglinskiy Region, at the basin spring of Big Goronay River, 5 km from Goromay Station. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638453. Vaccinium uliginosum L.
Wild. AS-03-118; CVAC 1596. Collected 08/27/2003 in Sakhalin, Russian Federation. Latitude 53° 54' 56" N. Longitude 142° 44' 14" E. Elevation 28 m. Sakhalin Island, Okhinskiy Region, on the marshland 40 km north of Okha City. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638454. Vaccinium uliginosum L.
Wild. AS-03-119; CVAC 1597. Collected 08/29/2003 in Sakhalin, Russian Federation. Latitude 53° 29' 3" N. Longitude 143° 4' 39" E. Elevation 19 m. Sakhalin Island, Okhinskiy Region, on the marshland 6 km from Vostochnyi Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638455. Vaccinium corymbosum L.
Wild. AS-03-120; CVAC 1598. Collected 08/16/2003 in Sakhalin, Russian Federation. Elevation 0 m. Sakhalin Island, Anivskiy Region, on the marshland 9 km from Aniva Village between the Peschannaya and Ozereckaya Rivers. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638456. Vaccinium corymbosum L.
Wild. AS-03-121; CVAC 1599. Collected 08/18/2003 in Sakhalin, Russian Federation. Latitude 49° 6' 58" N. Longitude 142° 51' 28" E. Elevation 133 m. Sakhalin Island, Dolinskiy Region, on the east slope of a rock quarry 5 km from Vzmorie Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638457. Vaccinium corymbosum L.
Wild. AS-03-122; CVAC 1600. Collected 08/18/2003 in Sakhalin, Russian Federation. Latitude 48° 11' 37" N. Longitude 142° 35' 29" E. Elevation 50 m. Sakhalin Island, Makarovskiy Region, coastal slope, 7 km south of

Vostochnyi Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638458. Vaccinium corymbosum L.
Wild. AS-03-123; CVAC 1601. Collected 08/18/2003 in Sakhalin, Russian Federation. Latitude 48° 11' 37" N. Longitude 142° 35' 29" E. Elevation 50 m. Sakhalin Island, Makarovskiy Region, on the foot of the coastal slope of Uyanka Cove, 10 km south of Vostochnyi Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638459. Vaccinium corymbosum L.
Wild. AS-03-124; AS-03-124A; CVAC 1602. Collected 08/18/2003 in Sakhalin, Russian Federation. Latitude 48° 11' 37" N. Longitude 142° 35' 29" E. Elevation 50 m. Sakhalin Island, Makarovskiy Region, at the foot of the coastal slope of Uyanka Cove, 10 km south of Vostochnyi Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638460. Vaccinium corymbosum L.
Wild. AS-03-125; CVAC 1603. Collected 08/19/2003 in Sakhalin, Russian Federation. Latitude 49° 6' 58" N. Longitude 142° 51' 28" E. Elevation 75 m. Sakhalin Island, Poronaiskii Region, on the right slope of the Gastellovka River 15 km above Gastello Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638461. Vaccinium corymbosum L.
Wild. AS-03-126; CVAC 1604. Collected 08/21/2003 in Sakhalin, Russian Federation. Elevation 89 m. Sakhalin Island, Poronaiskii Region, the left slope of the Gastellovka River, 20 km above Gastello Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638462. Vaccinium corymbosum L.
Wild. AS-03-127; CVAC 1605. Collected 09/02/2003 in Sakhalin, Russian Federation. Latitude 50° 11' 8" N. Longitude 142° 33' 13" E. Elevation 250 m. Sakhalin Island, Smirnykhovskiy region, Onor village, on the right slope of the Onorka River. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638463. Vaccinium corymbosum L.
Wild. AS-03-128; CVAC 1606. Collected 08/26/2003 in Sakhalin, Russian Federation. Latitude 52° 20' 58" N. Longitude 142° 55' 22" E. Elevation 22 m. Sakhalin Island, Noglikskiy Region, the marshland in the Krujka River Basin, 6 km to the west of Val village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638464. Vaccinium corymbosum L.
Wild. AS-03-129; CVAC 1607. Collected 08/29/2003 in Sakhalin, Russian Federation. Latitude 53° 29' 3" N. Longitude 143° 4' 39" E. Elevation 19 m. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638465. Vaccinium oxycoccos L.
Wild. AS-03-130; CVAC 1608. Collected 08/22/2003 in Sakhalin, Russian Federation. Latitude 50° 10' 58" N. Longitude 142° 44' 48" E. Elevation 147 m. Sakhalin Island, Smirnykhovskii Region, on the outskirts of an old airfield, 5 km from Onore Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638466. Vaccinium oxycoccos L.
Wild. AS-03-131; CVAC 1609. Collected 08/23/2003 in Sakhalin, Russian Federation. Latitude 51° 19' 10" N. Longitude 142° 39' 47" E. Elevation 50 m. Sakhalin Island, Tymovskii Region, on the marshland on the outskirts of the old Ul'va Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638467. Vaccinium oxycoccos L.
Wild. AS-03-132; CVAC 1610. Collected 08/25/2003 in Sakhalin, Russian Federation. Latitude 52° 6' 33" N. Longitude 142° 59' 20" E. Elevation 17 m. Sakhalin Island, Noglikskiy Region, on the marshland in the Dagi River Basin, 4 km from the Nogliki-Dagi highway. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638468. Vaccinium oxycoccos L.
Wild. AS-03-133; CVAC 1611. Collected 08/25/2003 in Sakhalin, Russian Federation. Latitude 52° 20' 58" N. Longitude 142° 55' 22" E. Elevation 22 m. Sakhalin Island, Noglikskiy Region, on the marshland in the Krujka River Basin, 6 km west of Val Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638469. Vaccinium oxycoccos L.
Wild. AS-03-134; CVAC 1612. Collected 08/26/2003 in Sakhalin, Russian Federation. Latitude 52° 30' 24" N. Longitude 143° 5' 12" E. Elevation 63 m. Sakhalin Island, Noglinskiy Region, on the marshland in the Big Goronay River Basin, 2 km from Goromay Station. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638470. Vaccinium oxycoccos L.
Wild. AS-03-135; CVAC 1613. Collected 08/29/2003 in Sakhalin, Russian Federation. Latitude 53° 29' 3" N. Longitude 142° 4' 39" E. Elevation 19 m. Sakhalin Island, Okhinskiy Region, on the marshland 6 km from Vostochnyi Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638471. Vaccinium oxycoccos L.
Wild. AS-03-136; CVAC 1614. Collected 08/27/2003 in Sakhalin, Russian Federation. Latitude 53° 54' 56" N. Longitude 142° 44' 14" E. Elevation 28 m. Sakhalin Island, Okhinskiy Region, on the marshland 40 km north of Okha City. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638472. Vaccinium oxycoccos L.
Wild. AS-03-137; CVAC 1615. Collected 08/23/2003 in Sakhalin, Russian Federation. Latitude 51° 19' 10" N. Longitude 142° 39' 47" E. Elevation 50 m. Sakhalin Island, Tymovskii Region, on the marshland on the outskirts of the old Ul'va Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638473. Vaccinium oxycoccos L.
Wild. AS-03-138; CVAC 1616. Collected 08/25/2003 in Sakhalin, Russian Federation. Latitude 52° 6' 33" N. Longitude 142° 59' 20" E. Elevation 17 m. Sakhalin Island, Noglikskiy Region, on the marshland in the Dagi River Basin, 4 km from the Nogliki-Dagi highway. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638474. Vaccinium oxycoccos L.
Wild. AS-03-139; CVAC 1617. Collected 08/25/2003 in Sakhalin, Russian Federation. Latitude 52° 20' 58" N. Longitude 142° 55' 22" E. Elevation 22 m. Sakhalin Island, Noglikskiy Region, on the marshland of the Krujka River basin, 6 km to the west of Val Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638475. Vaccinium oxycoccos L.
Wild. AS-03-140; CVAC 1618. Collected 08/26/2003 in Sakhalin, Russian Federation. Latitude 52° 30' 24" N. Longitude 143° 5' 12" E. Elevation 63 m. Sakhalin Island, Noglinskiy Region, on the marshland of the Big Goronay River basin, 2 km from Goromay Station. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638476. Vaccinium oxycoccos L.
Wild. AS-03-141; CVAC 1619. Collected 08/30/2003 in Sakhalin, Russian Federation. Latitude 53° 0' 12" N. Longitude 143° 3' 46" E. Elevation 18 m. Sakhalin Island, Okhinskiy Region, on the marshland of the Kadylan'i River basin, 2 km on the higher road to Nogliki-Okha. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 638477. Vaccinium oxycoccos L.
Wild. AS-03-142; CVAC 1620. Collected 08/29/2003 in Sakhalin, Russian Federation. Latitude 53° 29' 3" N. Longitude 143° 4' 39" E. Elevation 19 m. Sakhalin Island, Okhinskiy Region, on the marshland 6 km from Vostochnyi Village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

The following were donated by Daniel P. Hartmann, Hartmann's Plant Company, 310 60th Street, Grand Junction, Michigan 49056, United States. Received 05/27/2004.

PI 638478. Vaccinium myrtillus L.
Cultivar. "Erin's Bilberry"; CVAC 1622.

PI 638479. Vaccinium angustifolium Aiton
Cultivated. CVAC 1623.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan; Takao Sato, Hokkaido Forestry Research Institute, General Research and Information Center, Koshunai, Bibai, Hokkaido 0079-0918, Japan. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 638480. Vaccinium smallii A. Gray
Wild. V. smallii J10; HD-2004-10; CVAC 1624. Collected 07/09/2004 in Hokkaido, Japan. Latitude 43° 17' 24" N. Longitude 141° 51' 15" E. Elevation 107 m. Bibai Hokkaido Forestry Research Institute. Seed of this accession was collected from cultivated plants at the HFRI in

Bibai, Hokkaido, Japan Originally collected from an Alpine environment. Pedigree - Collected from the wild in Hokkaido, Japan. Hokkaido Forestry Research Institute and Greenery Research and Information Center is a state run facility by the Prefecture of Hokkaido. Native woody plants of Hokkaido are studied at this center. Dr. Takao Sato is a senior research scientist at this center and has written a book on 'Trees and Shrubs of Hokkaido'. Dr. Sato guided us through the collections at the HFRI. This accession was collected from cultivated plants of originally wild collected species growing in the experimental gardens. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U.S. Department of Agriculture, Agricultura Service, USA, prepared in May 2004.

PI 638481. Vaccinium praestans Lamb.
Wild. V. praestans J11; HD-2004-11; CVAC 1625. Collected 07/09/2004 in Hokkaido, Japan. Latitude 43° 17' 24" N. Longitude 141° 51' 15" E. Elevation 107 m. Bibai Hokkaido Forestry Research Institute. seed of this accession was collected from cultivated plants at the HFRI in Bibai, Hokkaido, Japan Originally collected from an Alpine environment. Pedigree - Collected from the wild in Hokkaido, Japan. Hokkaido Forestry Research Institute and Greenery Research and Information Center is a state run facility by the Prefecture of Hokkaido. Native woody plants of Hokkaido are studied at this center. Dr. Takao Sato is a senior research scientist at this center and has written a book on 'Trees and Shrubs of Hokkaido'. Dr. Sato guided us through the collections at the HFRI. This accession was collected from cultivated plants of originally wild collected species growing in the experimental gardens. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U.S. Department of Agriculture, Agricultura Service, USA, prepared in May 2004.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 638482. Vaccinium praestans Lamb.
Wild. V. praestans J18; HD-2004-18; CVAC 1626. Collected 07/11/2004 in Hokkaido, Japan. Latitude 42° 41' 54" N. Longitude 141° 27' 34" E. Elevation 181 m. Kunichi-Numa Lake. on edge of trail and overstory trees of Larix wet location, lycopodium near by pumice rocks. Pedigree - Collected from the wild in Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan; Shigeru Uemura, Hokkaido University, Field Science Center for Northern Biosphere, North Forest Research Labratory, Nayoro, Hokkaido 096-0071, Japan. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 638483. Vaccinium ovalifolium Sm.
Wild. V. ovalifolium J26; HD-2004-26; CVAC 1627. Collected 07/13/2004 in Hokkaido, Japan. Latitude 44° 23' 51" N. Longitude 142° 12' 16" E. Elevation 289 m. North Forest Research Laboratory Tokuda 250 Nayoro 2.5 km NE of main building complex. growing in swampy area in research forest usually at the base of Picea stands. Pedigree - Collected from the wild in Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004. Fruits were collected from about 3 plants. It was early in the season to collect V. ovalifolium fruit. The fruit was not plentiful on these plants only a few fruits per plant usually occur. These plan occur at the base of Picea stands, on tufts above the sphagnum boggy wet area.

PI 638484. Vaccinium smallii A. Gray
Wild. V. smallii J27; HD-2004-27; CVAC 1628. Collected 07/13/2004 in Hokkaido, Japan. Latitude 44° 23' 51" N. Longitude 142° 12' 16" E. Elevation 289 m. North Forest Research Laboratory Tokuda 250 Nayoro 2.5 km NE of main building complex. growing in swampy area in research forest usually at the base of Picea stands. Pedigree - Collected from the wild in Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004. The fruits were collected from several plants. These fruits were just beginning to turn deep dark red - not the dark ripe color yet. Many of the fruits were still green. The seeds may be immature. Thee smooth - not like the angled fruits of Vaccinium hirtum.

PI 638485. Vaccinium praestans Lamb.
Wild. V. praestans J28; HD-2004-28; CVAC 1629. Collected 07/13/2004 in Hokkaido, Japan. Latitude 44° 23' 51" N. Longitude 142° 12' 16" E. Elevation 289 m. North Forest Research Laboratory Tokuda 250 Nayoro 2.5 km NE of main building complex. growing in swampy area in research forest directly out of sphagnum with standing water below. Pedigree - Collected from the wild in Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004. These plants were growing in colonies at several places along the path. They were growing on mossy downed Picea trees.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan; Mutsumi Takahashi, Hokkaido Governmental Plant Genetic Resources Center (HPGRC), 363-2 Minamitakinokawa, Takikawa, Hokkaido 073-1103, Japan. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 638486. Vaccinium oxycoccos L.
Wild. V. oxycoccos J31; HD-2004-31; CVAC 1631. Collected 07/14/2004 in Hokkaido, Japan. Latitude 44° 28' 34" N. Longitude 142° 8' 32" E. Elevation 379 m. bog of the North Forest Research Laboratory near Nayoro 4 km NE of the main building. sphagnum bog in research forest. Pedigree - Collected from the wild in Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 638487. Vaccinium smallii A. Gray
Wild. V. smallii J41; HD-2004-41; CVAC 1632. Collected 07/15/2004 in Hokkaido, Japan. Latitude 44° 46' 29" N. Longitude 142° 9' 43" E. Elevation 498 m. north of Otoineppu-mura on forest trail off of route 275 Nakagawa Experimental Forest map compartment #153. edge of road open light exposure heavy rocky brown clay with some duff. Pedigree - Collected from the wild in Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638488. Vaccinium ovalifolium Sm.
Wild. V. ovalifolium J43; HD-2004-43; CVAC 1633. Collected 07/16/2004 in Hokkaido, Japan. Latitude 44° 50' 47" N. Longitude 142° 9' 55" E. Elevation 331 m. north of Otoineppu-mura Mt. Pankesan Nakagawa Experimental Forest. under bamboo back from the edge of the road. Pedigree - Collected from the wild in Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture

Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638489. Vaccinium smallii A. Gray
Wild. V. smallii J44; HD-2004-44; CVAC 1634. Collected 07/16/2004 in Hokkaido, Japan. Latitude 44° 50' 47" N. Longitude 142° 9' 55" E. Elevation 331 m. north of Otoineppu-mura Mt. Pankesan Nakagawa Experimental Forest. under bamboo back from the edge of the road. Pedigree - Collected from the wild in Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638490. Vaccinium praestans Lamb.
Wild. V. praestans 45; HD-2004-45; CVAC 1635. Collected 07/16/2004 in Hokkaido, Japan. Latitude 44° 51' 24" N. Longitude 142° 8' 57" E. Elevation 599 m. north of Otoineppu-mura Mt. Pankesan Nakagawa Experimental Forest top of mountain - in windy exposed site. alpine area with small stunted spruce, stunted bamboo very windy area, very cold in winter. Pedigree - Collected from the wild in Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638491. Vaccinium smallii A. Gray
Wild. V. smallii J47; HD-2004-47; CVAC 1636. Collected 07/16/2004 in Hokkaido, Japan. Latitude 44° 51' 22" N. Longitude 142° 8' 58" E. Elevation 595 m. north of Otoineppu-mura Mt. Pankesan Nakagawa Experimental Forest top of mountain - in windy exposed site. under bamboo back from the edge of the road. Pedigree - Collected from the wild in Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638492. Vaccinium smallii A. Gray
Wild. V. smallii J55; HD-2004-55; CVAC 1638. Collected 07/17/2004 in Hokkaido, Japan. Latitude 44° 13' 23" N. Longitude 143° 23' 3" E. Elevation 95 m. Shimararagy River about 2 km N of Monbetsu. back from edge of road on hill leading away from road. Pedigree - Collected from the wild in Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638493. Vaccinium smallii A. Gray
Wild. V. smallii J57; HD-2004-57; CVAC 1639. Collected 07/17/2004 in Hokkaido, Japan. Latitude 44° 5' 38" N. Longitude 143° 22' 21" E. Elevation 427 m. off of the road to Yubetsu at a turnoff on the left. back from edge of road on steep slope leading away from road. Pedigree - Collected from the wild in Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture

Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638494. Vaccinium vitis-idaea L.
Wild. V. vitis-idaea J58; HD-2004-58; CVAC 1640. Collected 07/17/2004 in Hokkaido, Japan. Latitude 44° 13' 23" N. Longitude 143° 23' 3" E. Elevation 427 m. Shimararagy River about 2 km from Monbetsu. back from edge of road on steep slope leading away from road. Pedigree - Collected from the wild in Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

PI 638495. Vaccinium praestans Lamb.
Wild. V. praestans J64; HD-2004-64; CVAC 1642. Collected 07/18/2004 in Hokkaido, Japan. Latitude 43° 39' 17" N. Longitude 143° 9' 54" E. Elevation 1070 m. Sekihoka Pass on provencial route 39. growing next to the stairs leading up to the top overlook under Betula platypetala. Pedigree - Collected from the wild in Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/23/2004.

PI 638496. Vaccinium ovatum Pursh
Wild. V. ovatum KH-2004-02; KH-2004-02; CVAC 1644. Collected 08/21/2004 in Washington, United States. Pedigree - Collected from the wild in Washington.

The following were collected by Peter Boches, USDA, ARS, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/25/2004.

PI 638497. Vaccinium membranaceum Douglas ex Torr.
Wild. PSB 1,2,4,5,6,9,10,11,12,13,14,15; V. membranaceum St. Charles Lake; CVAC 1645. Collected 08/23/2004 in Washington, United States. Pedigree - Collected from the wild in Washington.

PI 638498. Vaccinium ovalifolium Sm.
Wild. PSB 3,7,8; V. ovalifolium St. Charles Lake; CVAC 1646. Collected 08/23/2004 in Washington, United States. Pedigree - Collected from the wild in Washington.

PI 638499. Vaccinium membranaceum Douglas ex Torr.
Wild. PSB 16,21,22,23; V. membranaceum Meta Lake; CVAC 1647. Collected 08/23/2004 in Washington, United States. Pedigree - Collected from the wild in Washington.

PI 638500. Vaccinium ovalifolium Sm.
Wild. PSB 17,19,20; V. ovalifolium Meta Lake; CVAC 1648. Collected

08/23/2004 in Washington, United States. Pedigree - Collected from the wild in Washington.

PI 638501. Vaccinium membranaceum Douglas ex Torr.
Wild. PSB 18; V. membranaceum Meta Lake - Red; CVAC 1649. Collected 08/23/2004 in Washington, United States. Pedigree - Collected from the wild in Washington.

PI 638502. Vaccinium ovalifolium Sm.
Wild. PSB Ryan Lake; V. ovalifolium Ryan Lake; CVAC 1650. Collected 08/23/2004 in Washington, United States. Pedigree - Collected from the wild in Washington.

PI 638503. Vaccinium cespitosum Michx.
Wild. PSB 24; V. caespitosum Horseshoe Lake; CVAC 1651. Collected 08/29/2004 in Oregon, United States. Pedigree - Collected from the wild in Oregon.

The following were developed by Eduardo Hernandez, Texas A&M Agricultural Experiment Station, 2415 East Hwy 83, Weslaco, Texas 78596, United States; Benjamin Legendre, Louisiana State University, Sugar Station, P.O. Box 604, St. Gabriel, Louisiana 70776, United States; Jorge da Silva, Texas A&M Ag. Exp. Station, 2415 East US Highway 83, Weslaco, Texas 78596, United States; J.D. Miller, USDA-ARS, Sugarcane Field Station, 12990 US Highway 441 N., Canal Point, Florida 33438, United States; Andrew W. Scott, Rio Farms Inc., Rt. 1, Box 326, Monte Alto, Texas 78538, United States; N. Rozzef, Rio Grande Valley Sugar Growers, Inc., Santa Rosa, Texas 78593, United States. Received 01/28/2005.

PI 638504. Saccharum sp.
Cultivar. Pureline. "TCP89-3505"; M00784; Q 35201; Q 35408. CV-125. Pedigree - CP70-321 x CP78-304. Has a moderate population of medium-sized stalks that are covered with a white waxy coating. The stalks are of yellow color, with mid-size conoidal internodes and gold colored growth rings that are touched by the buds. Leaf curvature is rounded at the apex of the canopy. Leaf sheath has no pubescence, a brown dewlap, and no auricle. Leaves are not tightly attached to the stalk which, combined with its erect growth habit, makes it suitable for mechanical harvesting. Microsatellite markers have been produced form TCP89-3505 DNA for fingerprinting purposes. The following markers were produced: three fragments of EST-SSR50 [250,280 and 400 base pairs (bp) in size], 4 fragments of SMC872CG (160, 180, 250 and 280 bp) and three fragments from SMC869CG (200, 220 and 280).

The following were developed by Paul Mislevy, University of Florida, Agricultural Research & Education Center, 3401 Experiment Station, Ona, Florida 33865-9706, United States; Kenneth H. Quesenberry, University of Florida, Department of Agronomy, Forage Breeding and Genetics, Gainesville, Florida 32611-0500, United States; Ann R. Blount, University of Florida, North Florida Research, & Education Center, Mariana, Florida 32446-7906, United States; L.S. Dunavin, West Florida REC, P.O. Box 3634, Milton, Florida 32572-3634, United States. Received 02/03/2005.

PI 638505. Trifolium pratense L.
Cultivar. Population. "Southern Belle". CV-27. Pedigree - Using Cherokee

as base population, there were three cycles of selection for root-knot nematode resistance followed by two cycles of half-sib family selection to produce FLMR5. A cycle of mass selection produced FLMR6. Then 300 plants each of FLMR6 were screened for response to one of 3 RKN species; selected low gall and egg mass plants were reinoculated with the same RKN species. Consistently resistant plants were intercrossed to produce FLMR7. A seed increase of FLMR7 became pre-breeders seed of Southern Belle. Superior to all other known red clover cultivars in resistance to the several root-knot nematode species. In a greenhouse evaluation, Southern Belle had lower galling and egg mass scores than Cherokee. Also shows lower powdery mildew ratings. Equal to Cherokee in northern anthracnose susceptibility. Has annual and five year mean total seasonal dry matter yields not different from Cherokee, and similar to yield performance data. The primary yield advantage of both Southern Belle and Cherokee over other red clover cultivars when grown at more southern locations has been in first harvest yields, due to the non-dormancy (earlier spring growth) of Southern Belle and Cherokee. First harvest yields were approximately 1000 kg/ha greater than cult ivars developed at more northern locations. Total seasonal yields at southeastern locations usually equal or exceed central and northern USA developed cultivars. At Gainesville, FL, over 70% of spaced plants flowered before plants of any cultivars developed at more northern locations.

The following were developed by F.M. Bourland, University of Arkansas, Northeast Research and Ext. Center, P.O. Box 48, Keiser, Arkansas 72351, United States; D.C. Jones, Cotton Incorporated, 6399 Weston Parkway, Cary, North Carolina 27513, United States. Received 02/04/2005.

PI 638506. Gossypium hirsutum L.
Breeding. Pureline. Arkot 9111. GP-798. Pedigree - H1330 / M-725. Morphological traits similar to Stoneville 474 and PSC 355 (check cultivars) except has less dense leaf pubescence. Lint yields were similar to the check cultivars, with performance relatively better in north than south Arkansas environments. Compared to these check cultivars, tended to have higher lint fraction, longer fiber length, lower micronaire, and slightly lower fiber strength. Is resistant to all U.S. races of Xanthomonas campestris pv. malvacearum, the causal agent of bacterial blight, and resistance to fusarium wilt was equal to a known resistant check.

PI 638507. Gossypium hirsutum L.
Breeding. Pureline. Arkot 9101. GP-799. Pedigree - Tamcot SP21S / PD 6520 // H1130. Morphological traits are similar to Stoneville 474 and PSC 355 (check cultivars) except that has less dense leaf pubescence and was slightly shorter. Lint yields were similar to the check cultivars, with performance relatively better in north than south Arkansas environments. Displayed ca. 8% higher lint index, ca. 7% larger seed and ca. 7% more fibers per seed than the check cultivars, and tended to have similar lint fraction, fiber length, micronaire, and higher fiber strength and slightly lower fiber elongation. Resistant to all U.S. races of Xanthomonas campestris pv. malvacearum, fusarium wilt resistance was equal to a known resistant check. Demonstrated an intermediate level of resistance to root knot nematode.

PI 638508. Gossypium hirsutum L.
Breeding. Pureline. Arkot 9108. GP-800. Pedigree - Tamcot SP21S / PD 6520 // DES 16ne/2*DP90. Morphological traits similar to Stoneville 474 and PSC 355 (check cultivars) except that Arkot 9108 has less dense leaf pubescence and was slightly shorter. In over 29 replicated field tests in Arkansas, lint yields of Arkot 9108 were ca. 7% higher than the check cultivars, displayed ca. 8% higher lint index, ca. 7% larger seed and ca. 7% more fibers per seed than the check cultivars. Also tended to have similar lint fraction, fiber length, higher fiber strength, higher micronaire, and slightly lower fiber elongation vs. checks. Resistant to all U.S. races of Xanthomonas campestris pv. malvacearum, fusarium wilt was equal to a known resistant check. Has an intermediate level of resistance to tarnished plant bug.

The following were developed by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg.-N, Lexington, Kentucky 40546-0019, United States; G.L. Olson, University of Kentucky, Dept. of Agronomy, Lexington, Kentucky 40546-0091, United States. Received 02/08/2005.

PI 638509. Trifolium pratense L.
Cultivar. Population. "Lucky"; 29-L38-1801. CV-28. Pedigree - Synthetic cultivar developed by five cycles of selection in GP-9 multiple leaflet gene marker. Five cycles of selection were conducted to increase expression of the multiple leaflet character. Leaves of plants of the cultivar vary from three to eight leaflets and occasionally produce cornucopia-shaped leaflets varying up to three. Plants vary in number of multiple leafleted leaves from 0 to 10 depending on size and number of leaves per plant. At close spacing 50% of plants have multiple leaflets and 33% have two or more multiple leaflets per plant.

The following were developed by Berlin D. Nelson, North Dakota State University, Department of Plant Pathology, Walster Hall 306, PO Box 5012, Fargo, North Dakota 58105-5012, United States; Theodore C. Helms, North Dakota State University, Dept. of Plant Science, Rm 166 Loftsgard Hall, Fargo, North Dakota 58105-5051, United States; R. Jay Goos, North Dakota State University, Soil Science Dept., 127 Walster Hall, Fargo, North Dakota 58105, United States. Received 02/15/2005.

PI 638510. Glycine max (L.) Merr.
Cultivar. Pureline. "Pembina"; ND99-2282. PVP 200500169; CV-478. Pedigree - ND93-5849*Pioneer 9004. Has the Rps4 allele which confers resistance to Phytophthora sojae. Has purple flower color, gray pubescence, brown pod color, shiny seed coat with yellow hila. Pembina is a 00.5 maturity cultivar with moderate iron-deficiency chlorosis tolerance and good yield for its maturity. It is a non-GMO cultivar.

The following were developed by Berlin D. Nelson, North Dakota State University, Department of Plant Pathology, Walster Hall 306, PO Box 5012, Fargo, North Dakota 58105-5012, United States; Theodore C. Helms, North Dakota State University, Dept. of Plant Science, Rm 166 Loftsgard Hall, Fargo, North Dakota 58105-5051, United States; K.C. Chang, North Dakota State University, Dept. of Food and Nutrition, Fargo, North Dakota 58105, United States; R. Jay Goos, North Dakota State University, Soil Science Dept., 127 Walster Hall, Fargo, North Dakota 58105, United States. Received 02/15/2005.

PI 638511. Glycine max (L.) Merr.
Cultivar. Pureline. "ProSoy"; ND99-4022. PVP 200500170; CV-477. Pedigree - Norpro*Kato. Is a 0.8 maturity cultivar intended for the tofu specialty market. Has purple flower color, gray pubescence, brown pod color, dull yellow seed coat and yellow hila. It has no major genes for Phytophthora sojae, but has moderate tolerance to iron deficiency chlorosis. It is a non-GMO cultivar with about 46% protein on a dry-weight basis.

The following were developed by James S. Quick, Colorado State University, Soil and Crop Sciences, Fort Collins, Colorado 80523, United States; O.K. Chung, USDA-ARS, U.S. Grain Marketing Research Lab., Hard Winter Wheat Quality Lab., Manhattan, Kansas 66506, United States; Frank Peairs, Colorado State University, Dept. of Bioagricultural Sciences & Pest Management, Fort Collins, Colorado 80523-1177, United States; J.B. Rudolph, Colorado State University, Dept. of Entomology, Fort Collins, Colorado 80523, United States; John Stromberger, Colorado State University, Dept. of Soil and Crop Sciences, 1170 Campus Delivery, Fort Collins, Colorado 80523, United States; B.W. Seabourn, USDA, ARS, Grain Marketing and Production Research Center, Hard Winter Wheat Quality Lab., Manhattan, Kansas 66506, United States; Colorado Wheat Research Foundation, Colorado, United States; Scott D. Haley, Colorado State University, Soil and Crop Sciences Department, 1170 Campus Delivery, Fort Collins, Colorado 80523, United States; J.J. Johnson, Colorado State University, Dept. of Soil and Crop Sciences, Fort Collins, Colorado 80523, United States; James Kolmer, USDA-ARS, Cereal Disease Laboratory, 1551 Lindig, St. Paul, Minnesota 55108, United States; Sally Clayshulte, Colorado State University, Dept. of Soil and Crop Sciences, Plant Science Building W18, Fort Collins, Colorado 80523, United States; B. Clifford, Colorado State University, Dept. of Soil and Crop Sciences, Fort Collins, Colorado 80523, United States; Yue Jin, USDA, ARS, University of Minnesota, Cereal Disease Lab, St. Paul, Minnesota 55108, United States. Received 02/16/2005.

PI 638512. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "HATCHER"; CO980607. CV-971; PVP 200500340. Pedigree - Yuma/PI 372129//TAM 200/3/4*Yuma/4/KS91H184/Vista. Released 2004. Hatcher is an awned, white-chaffed, medium maturity, semidwarf hard red winter wheat with good shattering tolerance and winterhardiness. Straw strength is average, and it is moderately susceptible to stem rust leaf rust, and stripe rust. Susceptible to both wheat streak mosaic virus and barley yellow dwarf virus. Heterogeneous for resistance to the Great Plains biotype of Hessian fly, susceptible to greenbug, and resistant to Biotype 1 of the Russian wheat aphid.

The following were donated by USDA, ARS, NCGRP, National Center for Genetic Resources Preservation, 1111 South Mason Street, Fort Collins, Colorado 80521-4500, United States; Charles M. Rick, University of California, Department of Vegetable Crops, Davis, California 95616, United States. Received 1988.

PI 638513. Solanum lycopersicum L.
Uncertain. NSL 220789; LA2801; UC82B; G 32191.

The following were developed by Svalof Weibull AB, Svalow, Malmohus, Sweden. Received 03/08/2005.

PI 638514 PVPO. Pisum sativum L.
Cultivar. "SW Marquee". PVP 200500037.

PI 638515 PVPO. Pisum sativum L.
Cultivar. "K2". PVP 200500038.

PI 638516 PVPO. Pisum sativum L.
Cultivar. "SW Carousel". PVP 200500039.

The following were developed by Seminis Vegetable Seeds, Inc., United States. Received 03/08/2005.

PI 638517 PVPO. Apium graveolens L.
Cultivar. "Triple Eight". PVP 200500062.

The following were developed by Advanta USA, Inc., United States. Received 03/08/2005.

PI 638518 PVPO. Lolium perenne L.
Cultivar. "Radiant II". PVP 200500063.

The following were developed by Speight Seed Farms, Inc., Box 507, Winterville, North Carolina 28590, United States. Received 03/08/2005.

PI 638519 PVPO. Nicotiana tabacum L.
Cultivar. Pureline. "Speight 210". PVP 200500066.

The following were developed by Pure Seed Testing, Inc., United States. Received 03/08/2005.

PI 638520 PVPO. Lolium perenne L.
Cultivar. "Refine". PVP 200500099.

The following were developed by Marie Langham, South Dakota State University, Department of Plant Science, 219 Agr. Hall, Box 2207-A, Brookings, South Dakota 57007, United States; Don V. McVey, USDA, ARS, University of Minnesota, Cereal Rust Laboratory, St. Paul, Minnesota 55105, United States; O.K. Chung, USDA-ARS, U.S. Grain Marketing Research Lab., Hard Winter Wheat Quality Lab., Manhattan, Kansas 66506, United States; J. Rickertsen, South Dakota State University, Plant Science Dept., Brookings, South Dakota 57007, United States; S. Kalsbeck, South Dakota State University, Plant Science Department, Brookings, South Dakota 57007, United States; B.W. Seabourn, USDA, ARS, Grain Marketing and Production Research Center, Hard Winter Wheat Quality Lab., Manhattan, Kansas 66506, United States; Scott D. Haley, Colorado State University, Soil and Crop Sciences Department, 1170 Campus Delivery, Fort Collins, Colorado 80523, United States; R. Little, South Dakota State Univ., Plant Science Dept., Brookings, South Dakota 57007, United States; Amir Ibrahim, South Dakota State University, Plant Sciences Department, Brookings, South Dakota 57007, United States; Yue Jin, USDA, ARS,

University of Minnesota, Cereal Disease Lab, St. Paul, Minnesota 55108, United States; South Dakota Agric. Exp. Station, Brookings, South Dakota, United States. Received 03/08/2005.

PI 638521. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. WENDY. PVP 200500102; CV-991. Pedigree - SD89333 / Abilene. Released 2004. Awned, white-glumed, early maturing, semi-dwarf hard white winter wheat with high yield potential and excellent winter hardiness. Has moderate resistance to stem rust and has been postulated to carry Sr24 and Sr31. Is homogeneous for the 1BL.1RS wheat-rye translocation. Is moderately susceptible to leaf rust and is tolerant to tan spot. Is moderately susceptible to wheat streak mosaic virus. Has exhibited intermediate reaction to wheat soil-borne mosaic virus.

The following were developed by Texas Agricultural Experiment Station, Texas, United States. Received 03/08/2005.

PI 638522. Oryza sativa L.
Cultivar. Pureline. "Cala"; Duplicate of PI 633972.

The following were developed by Frederic L. Kolb, University of Illinois, Department of Crop Sciences, 1102 S. Goodwin Avenue, Urbana, Illinois 61801, United States; N.J. Smith, University of Illinois, Dept. of Crop Sciences, 1102 S. Goodwin Avenue, Urbana, Illinois 61801, United States; University of Illinois, The Board of Trustees, Urbana, Illinois, United States. Received 03/08/2005.

PI 638523. Avena sativa L.
Cultivar. Pureline. "SPURS"; IL95-1241. PVP 200500104; CV-374. Pedigree - Jay/Rodeo. Released 2003. Spring oat cultivar with high yield potential, very good test weight, tan kernels, and good barley yellow virus tolerance and crown rust resistance. Moderately early and has moderately short plant type. Test weight has been higher than the test weight of Ogle and Rodeo and similar to Blaze. Midseason variety; about the same maturity as Jerry. About one to two days earlier than earlier than Ogle, Blaze and Jay and three days earlier than Rodeo. Usually slightly shorter than Blaze, Rodeo, Ogle and Jerry, but slightly taller than Jay. Somewhat more resistant to lodging than Rodeo or Blaze, but not as lodging resistant as Jay. Moderately tolerant to barley yellow dwarf virus and has been resistant to crown rust (Puccinia coronata Cda. f. sp. avenae Eriks.), but may be susceptible to some races of crown rust. The BYDV tolerance of Spurs is similar to Blaze and Ogle. Crown rust resistance of Spurs is similar to Blaze. Susceptible to loose smut (Ustilago avenae (Pers.) Rostr.). Has tan seed, which is fluoresce in ultraviolet light.

The following were developed by Wisconsin Alumni Research Foundation, University of Wisconsin, Madison, Wisconsin, United States. Received 03/08/2005.

PI 638524 PVPO. Avena sativa L.
Cultivar. Pureline. "Esker". PVP 200500132. Pedigree - Jim/Gem.

The following were developed by Seminis Vegetable Seeds, Inc., United States. Received 03/08/2005.

PI 638525 PVPO. Phaseolus vulgaris L.
Cultivar. Pureline. "WINDBREAKER";. PVP 200500105.

The following were developed by Rutgers University, New Jersey Agriculture Experiment Station, New Brunswick, New Jersey 08903, United States. Received 03/08/2005.

PI 638526 PVPO. Lolium perenne L.
Cultivar. Pureline. "Paragon GLR". PVP 200500111.

The following were developed by California Planting Cotton Seed Distributors, 30597 Jack Ave., Shafter, California 93263, United States. Received 03/08/2005.

PI 638527 PVPO. Gossypium hirsutum L.
Cultivar. Pureline. "Cobalt Pima". PVP 200500112.

PI 638528 PVPO. Gossypium hirsutum L.
Cultivar. Pureline. "Acala NemX HY". PVP 200500113.

PI 638529 PVPO. Gossypium hirsutum L.
Cultivar. Pureline. "Acala Fiesta RR". PVP 200500114.

PI 638530 PVPO. Gossypium hirsutum L.
Cultivar. Pureline. "Hammer". PVP 200500115.

PI 638531 PVPO. Gossypium hirsutum L.
Cultivar. Pureline. "Acala Ultima EF". PVP 200500116.

The following were developed by Abbott & Cobb, Inc., United States. Received 03/08/2005.

PI 638532. Citrullus lanatus (Thunb.) Matsum. & Nakai
Cultivar. Pureline. "KG8". PVP 200500117.

PI 638533. Citrullus lanatus (Thunb.) Matsum. & Nakai
Cultivar. Pureline. "KXEL". PVP 200500133.

The following were developed by Mission Ranches, United States. Received 03/08/2005.

PI 638534 PVPO. Lactuca sativa L.
Cultivar. Pureline. "King Kong". PVP 200500131.

The following were developed by Victor L. DeMacon, Washington State University, Spring Wheat Breeding & Genetics, 51 Harms Road, Pullman, Washington 99163, United States; Kimberlee Kidwell, Washington State University, Dept. of Crop & Soil Sciences, Pullman, Washington 99164-6420, United States; Kimberly Garland Campbell, USDA, ARS, Washington State

University, P.O. Box 646420, Pullman, Washington 99164-6420, United States; Melissa McClendon, Washington State University, Dept. of Crop & Soil Sciences, 201 Johnson Hall, Pullman, Washington 99164-6420, United States; Dipak Santra, Washington State University, Dept. of Crop & Soil Sciences, PBS1 207, Pullman, Washington 99164-6420, United States. Received 03/14/2005.

PI 638535. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. "FARNUM"; WA007975; NSGC 9503. Pedigree - WA007869*4/Glupro. Common type hard red winter wheat. Backcross-derived line containing a chromosome region on 6BS from Glupro that was projected to result in a 1-2% increase in grain protein concentration. Flanking markers Xucw71 and Xgwm508, along with Xgwm644 and Xgwm193, were used in marker-assisted selection strategies to monitor for the presence of the region during backcrossing. This line also carries a durable stripe rust resistance gene, Yr36, that is closely linked to the high grain protein concentration region. It has higher grain protein concentration than both the recurrent and donor parents, along with improved milling and baking quality compared to the recurrent parent. Grain yield equaled or exceeded that of the recurrent parent in prelim inary yield trials in 2004. It is tall and awned with mid-season maturity, white straw and white glumes. Adapted to the semi-arid production areas of eastern Washington. Initial replicated field traisl have shown it to have superior agronomic performance, high grain protein content and excellent milling and baking quality characteristics.

The following were developed by Kimberlee Kidwell, Washington State University, Dept. of Crop & Soil Sciences, Pullman, Washington 99164-6420, United States; Kimberly Garland Campbell, USDA, ARS, Washington State University, P.O. Box 646420, Pullman, Washington 99164-6420, United States; Brent Barrett, AgResearch, Grassland Research Centre, Private Bag 11008, Palmerston North, North Island, New Zealand; Melissa McClendon, Washington State University, Dept. of Crop & Soil Sciences, 201 Johnson Hall, Pullman, Washington 99164-6420, United States; Dipak Santra, Washington State University, Dept. of Crop & Soil Sciences, PBS1 207, Pullman, Washington 99164-6420, United States. Received 03/14/2005.

PI 638536. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. WA007995; NSGC 9504. Pedigree - Scarlet*6/Glupro. Common type hard red spring wheat. Near-isogenic backcross-derivative of Scarlet that contains a chromosome region on 6BS from Glupro that was projected to result in a 1-2% increase in grain protein concentration. Flanking markers Xucw71 and Xgwm508, along with Xgwm644 and Xgwm193, were used in marker-assisted selection strategies to monitor for the presence of the region during backcrossing. The line also carries a durable stripe rust resistance gene, Yr36, that is closely linked to the high grain protein concentration region. It is tall and awned with mid-season maturity, white straw and white glumes. It is broadly adapted to a wide range of production conditions across eastern Washington, and is intended to replace Scarlet based on its improved stripe rust resistance and enhanced grain protein concentration. Grain yields and test weights were nearly identical to Scarlet in replicated field trials conducted from 2002 to 2004. Milling quality is similar to Scarlet, however bread loaf volume is superior to Scarlet.

PI 638537. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. WA007998; NSGC 9505. Pedigree - Tara 2002 *6/Glupro.

Hard red spring wheat. Near-isogenic backcross-derivative of Tara 2002 that contains a chromosome region on 6BS from Glupro that was projected to result in a 1-2% increase in grain protein concentration. Flanking markers Xucw71 and Xgwm508, along with Xgwm644 and Xgwm193, were used in marker-assisted selection strategies to monitor for the presence of the region during backcrossing. It is tall and awned with mid-season maturity, white straw and white glumes. Targeted to the northeastern and southeastern spring wheat production areas of Washington as a replacement for Tara 2002 based on its superior agronomic performance and increased grain protein concentration. Grain yields and test weights were equal or higher than those of the recurrent parent (Tara 2002) in replicated field trials conducted from 2002 to 2004. Milling and baking characteristics are similar to Tara 2002.

The following were developed by H.H. Mundel, Agriculture and Agri-Food Canada, Research Centre, Box 3000, Lethbridge, Alberta T1J 4B1, Canada. Received 03/01/2005.

PI 638538. Carthamus tinctorius L.
Cultivar. "Lesaf 486"; W6 26664. Pedigree - Saffire-29-114/3/Riconada//Siffire/Lesaf34BW with Saffire a 1985 early maturing Canadian variety. Lesaf 486 up to Lesaf 499 have the same parentage, but other characters do vary.

PI 638539. Carthamus tinctorius L.
Cultivar. "Lesaf 487"; W6 26665. Pedigree - Saffire-29-114/3/Riconada//Siffire/Lesaf34BW with Saffire a 1985 early maturing Canadian variety. Lesaf 486 up to Lesaf 499 have the same parentage, but other characters do vary.

PI 638540. Carthamus tinctorius L.
Cultivar. "Lesaf 488"; W6 26666. Pedigree - Saffire-29-114/3/Riconada//Siffire/Lesaf34BW with Saffire a 1985 early maturing Canadian variety. Lesaf 486 up to Lesaf 499 have the same parentage, but other characters do vary.

PI 638541. Carthamus tinctorius L.
Cultivar. "Lesaf 489"; W6 26667. Pedigree - Saffire-29-114/3/Riconada//Siffire/Lesaf34BW with Saffire a 1985 early maturing Canadian variety. Lesaf 486 up to Lesaf 499 have the same parentage, but other characters do vary.

PI 638542. Carthamus tinctorius L.
Cultivar. "Lesaf 490"; W6 26668. Pedigree - Saffire-29-114/3/Riconada//Siffire/Lesaf34BW with Saffire a 1985 early maturing Canadian variety. Lesaf 486 up to Lesaf 499 have the same parentage, but other characters do vary.

PI 638543. Carthamus tinctorius L.
Cultivar. "Lesaf 491"; W6 26669. Pedigree - Saffire-29-114/3/Riconada//Siffire/Lesaf34BW with Saffire a 1985 early maturing Canadian variety. Lesaf 486 up to Lesaf 499 have the same parentage, but other characters do vary.

PI 638544. Carthamus tinctorius L.
Cultivar. "Lesaf 492"; W6 26670. Pedigree -

Saffire-29-114/3/Riconada//Siffire/Lesaf34BW with Saffire a 1985 early maturing Canadian variety. Lesaf 486 up to Lesaf 499 have the same parentage, but other characters do vary.

PI 638545. Carthamus tinctorius L.
Cultivar. "Lesaf 493"; W6 26671. Pedigree - Saffire-29-114/3/Riconada//Siffire/Lesaf34BW with Saffire a 1985 early maturing Canadian variety. Lesaf 486 up to Lesaf 499 have the same parentage, but other characters do vary.

PI 638546. Carthamus tinctorius L.
Cultivar. "Lesaf 495"; W6 26672. Pedigree - Saffire-29-114/3/Riconada//Siffire/Lesaf34BW with Saffire a 1985 early maturing Canadian variety. Lesaf 486 up to Lesaf 499 have the same parentage, but other characters do vary.

PI 638547. Carthamus tinctorius L.
Cultivar. "Lesaf 497"; W6 26673. Pedigree - Saffire-29-114/3/Riconada//Siffire/Lesaf34BW with Saffire a 1985 early maturing Canadian variety. Lesaf 486 up to Lesaf 499 have the same parentage, but other characters do vary.

PI 638548. Carthamus tinctorius L.
Cultivar. "Lesaf 499"; W6 26674. Pedigree - Saffire-29-114/3/Riconada//Siffire/Lesaf34BW with Saffire a 1985 early maturing Canadian variety. Lesaf 486 up to Lesaf 499 have the same parentage, but other characters do vary.

The following were developed by Ken Russell, University of Nebraska-Lincoln, Department of Agronomy and Horticulture, 279 Plant Science Bldg., 38th and Fair, Lincoln, Nebraska 68583-0915, United States. Received 02/15/2005.

PI 638549. Zea mays L. **subsp. mays**
Breeding. Inbred. N551. PL-324. Pedigree - NCLNB_02)-139A-2-1-3-1-1. The parental population was formed from a diallel cross of 18 lines with some tolerance to corn lethal necrosis disease followed by two cycles of S1 and S2 per se selection for additional tolerance. The primary background of this population is Stiff Stalk germplasm. Is a moderately tall inbred with white cobs and a maturity classification of AES 700.

PI 638550. Zea mays L. **subsp. mays**
Breeding. Inbred. N552. PL-325. Pedigree - NS[S1]_08)-2182-4-3-3-1-1-1. The parental population is a Stiff Stalk that was improved by eight cycles of S1 selection for grain yield and stalk strength. Is an inbred of medium height with red cobs and a maturity classification of AES 600. In high yielding environments, many plants of this inbred have produced two ears.

The following were developed by Jim Hawk, University of Delaware, Department of Plant and Soil Sciences, Townsend Hall 152, Newark, Delaware 19717-1303, United States; Tecle Weldekidan, University of Delaware, Department of Plant and Soil Sciences, 147 Townsend Hall, Newark, Delaware 19717-1303, United States. Donated by Jim Hawk, University of Delaware, Department of Plant and Soil Sciences, Townsend Hall 152, Newark, Delaware 19717-1303, United States. Received 03/03/2005.

PI 638551. Zea mays L. **subsp. mays**
Breeding. Inbred. DE3; Source 04-126. PL-321; REST 638551. Pedigree - DKXL212:N11a-191-1-1-1-1-1-1-1. A vigorous silker with good flowering synchrony. Has about the same number of days to pollen shed as B73Ht and Mo17Ht, but silks one and a half days earlier than B73Ht and four days earlier than Mo17Ht. It has the agravitropic phenotype for the primary root. Is shorter than B73Ht and also has lower ear placement. Ears have 14-16 kernel rows and white cob color. Pollen production and anthesis duration are excellent. Has intermediate resistance to first and second-generation European corn borer and gray leaf spot. Has good yield in hybrid performance with Stiff Stalk testers.

PI 638552. Zea mays L. **subsp. mays**
Breeding. Inbred. DE4; Source 04-132. PL-322; REST 638552. Pedigree - DKXL212:N11a-365-1-1-2-1-1-1-1. A vigorous silker with good flowering synchrony. Sheds pollen about one day later compared to B73Ht and about a half day later than Mo17Ht, but silks one day earlier than B73Ht and about three days earlier than Mo17Ht. Has similar plant height as B73Ht but lower ear placement. Has two-ear tendency and ears with 14-16 kernel rows and red cob color. Pollen production and anthesis duration are excellent. Has intermediate resistance to first and second-generation European corn borer and has resistance to gray leaf spot. Observed premature death associated with root rot symptoms. Has good yield in hybrid performance with Stiff Stalk testers.

PI 638553. Zea mays L. **subsp. mays**
Breeding. Inbred. DE5; Source 04-138. PL-323; REST 638553. Pedigree - DE(BSSS)C2-420-3-2-1-1-1-1-1. A vigorous silker with good flowering synchrony.Sheds pollen two days later and silks about a half day later than B73Ht. Is taller than B73Ht in plant height but similar in ear placement. Has ears with 18 kernel rows and red cob color, and has excellent grain quality. Has high leaf feeding resistance and intermediate resistance to second-generation European corn borer. It is susceptible to gray leaf spot. Has good yield in hybrid performance with non-Stiff Stalk testers.

The following were developed by Robert E. Allan, USDA-ARS, Dept. of Crop & Soil Science, 209 Johnson Hall, Pullman, Washington 99164, United States.
Received 02/22/2005.

PI 638554. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 585; 02CF 96. Pedigree - Stephens 2 * / Triple Dirk VRN 1 // 5 * Stephens, 99CF 585. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having Vrn 1 allele for spring habit derived from Triple Dirk Vrn 1 NIL. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) soft kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, test wt., plant ht., kernel hardness, kernel wt., protein %, and sedimentation value; NIL < for grain yield vs. SPN (<17%). From spring planting grain yield, test wt., plant ht., were < fall ss by 5,9 and 14% respectively. Heads 14d later than spring check cv. (Alpowa); equals it for grain yield.

PI 638555. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 587; 02CF 97. Pedigree - Stephens 2 * / Triple

Dirk VRN 1 // 5 * Stephens, 99CF 587. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having Vrn 1 allele for spring habit derived from Triple Dirk Vrn 1 NIL. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) soft kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, test wt., grain yield, kernel hardness, kernel wt., protein %, and sedimentation value; NIL 5 cm < SPN for plant ht. From spring planting grain yield, test wt., plant ht., were < fall-sown values, 10 and 14% respectively. Heads 14d later than spring check cv. (Alpowa); grain yield < 19% than Alpowa.

PI 638556. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 591; 02CF 98. Pedigree - Stephens 2 * / Triple Dirk VRN 1 // 5 * Stephens, 99CF 591. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having Vrn 1 allele for spring habit derived from Triple Dirk Vrn 1 NIL. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) soft kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, test wt., grain yield, plant ht., kernel hardness, kernel wt., protein %, and sedimentation value; From spring planting grain yield, test wt., plant ht., were < fall-sown values by 26, 4 and 14% restively. Heads 11d later than spring check cv. (Alpowa); equals it for grain yield.

PI 638557. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 597; 02CF 99. Pedigree - Stephens 2 * / Triple Dirk VRN 1 // 5 * Stephens, 99CF 597. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having Vrn 1 allele for spring habit derived from Triple Dirk Vrn 1 NIL. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) soft kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for heading date, test wt., kernel hardness, kernel wt., protein %, and sedimentation value. NIL < SPN for grain yield (>10%), survival (<17%); > SPN for plant ht. (>8%). From spring planting grain yield, test wt.,e < fall-sown values by 11, 3 and 19% respectively. Heads 10d later than spring check cv. (Alpowa); equals it for grain yield.

PI 638558. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 598; 01S 1051. Pedigree - Stephens 2 * / Triple Dirk VRN 1 // 5 * Stephens, 99CF 598. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having Vrn 1 allele for spring habit derived from Triple Dirk Vrn 1 NIL. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) soft kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, plant ht., kernel hardness, kernel wt., protein %, and sedimentation value. NIL < SPN for test wt. (<23g/L) and grain yield (<16%). From spring planting grain yield, test wt., plant ht., were wn values by 11, 3 and 17% respectively. Heads 11d later than spring check cv. (Alpowa); equals it for grain yield.

PI 638559. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 589; 02CF 102. Pedigree - Stephens 2 * / Triple Dirk Vrn 1 // 5 * Stephens, 99CF 589. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 1 allele for winter habit derived from SPN. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, plant ht., grain yield,

kernel hardness, kernel wt., protein %, and sedimentation value; < SPN for test wt. (<24g/L).

PI 638560. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 590; 02CF 103. Pedigree - Stephens 2 * / Triple Dirk Vrn 1 // 5 * Stephens, 99CF 590. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 1 allele for winter habit derived from SPN. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, plant ht., test wt., grain yield, kernel hardness, kernel wt., protein %, and sedimentation value.

PI 638561. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 593; 02CF 104. Pedigree - Stephens 2 * / Triple Dirk Vrn 1 // 5 * Stephens, 99CF 593. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 1 allele for winter habit derived from SPN. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, plant ht., test wt., grain yield, kernel hardness, kernel wt., protein %, and sedimentation value.

PI 638562. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 600; 02CF 105. Pedigree - Stephens 2 * / Triple Dirk Vrn 1 // 5 * Stephens, 99CF 600. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 1 allele for winter habit derived from SPN. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for heading date and test wt. NIL < SPN for survival (<38%), grain yield (<27%), and plant ht. (<8%).

PI 638563. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 604; 02CF 106. Pedigree - Stephens 2 * / Triple Dirk Vrn 1 // 5 * Stephens, 99CF 604. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 1 allele for winter habit derived from SPN. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for heading date, test wt., grain yield, kernel hardness, kernel wt., protein %, and sedimentation value. NIL < SPN for plant ht. (<13%) and survival (<47%).

PI 638564. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 605; 02CF 108. Pedigree - Stephens 2 * / Triple Dirk VRN 2 // 5 * Stephens, 99CF 605. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having Vrn 2 allele for spring habit derived from Triple Dirk Vrn 2 NIL. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) soft kernels. NIL phenotypically similar to SPN. >From fall plang NIL similar to SPN for survival, heading date, plant ht., kernel hardness, protein %, and sedimentation value. NIL < SPN for kernel wt. (<7mg), test wt. (<17g/L) and grain yield (<20%). From spring planting grain yield, test wt., plantsown values by 25, 7 and 20%, respectively. Heads 16d later than spring check cv. (Alpowa) and grain yield 23% < than Alpowa.

PI 638565. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 611; 02CF 109. Pedigree - Stephens 2 * / Triple Dirk VRN 2 // 5 * Stephens, 99CF 611. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having Vrn 2 allele for spring habit derived from Triple

Dirk Vrn 2 NIL. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) soft kernels. NIL phenotypically similar to SPN. >From fall plang NIL similar to SPN for survival, plant ht., heading date, kernel hardness, protein %, and sedimentation value. NIL < SPN for kernel wt. (<7mg), test wt. (<18g/L) and grain yield (<13%). From spring planting grain yield, test wt., plantsown values by 37, 7 and 16%, respectively. Heads 16d later than spring check cv. (Alpowa) and grain yield 29% < than Alpowa.

PI 638566. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 617; 02CF 110. Pedigree - Stephens 2 * / Triple Dirk VRN 2 // 5 * Stephens, 99CF 617. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having Vrn 2 allele for spring habit derived from Triple Dirk Vrn 2 NIL. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) soft kernels. NIL phenotypically similar to SPN. >From fall plang NIL similar to SPN for heading date, plant ht., test wt., grain yield, kernel hardness, kernel wt., protein %, and sedimentation value. NIL < SPN for survival (55 vs 65%). From spring planting grain yield, test wt., plant ht. < fall-sown val 40, 7 and 15%, respectively. Heads 16d later than spring check cv. (Alpowa) and 30% < Alpowa for grain yield.

PI 638567. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 623; 02CF 112. Pedigree - Stephens 2 * / Triple Dirk VRN 2 // 5 * Stephens, 99CF 623. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having Vrn 2 allele for spring habit derived from Triple Dirk Vrn 2 NIL. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) soft kernels. NIL phenotypically similar to SPN. >From fall plang NIL similar to SPN for survival, heading date, plant ht., test wt., grain yield, kernel hardness, kernel wt., protein %, and sedimentation value. From spring planting grain yield, test wt., plant ht. < fall-sown values by 42, 9 and 9%, respectly. Heads 17d later than spring check cv. (Alpowa) and 29% < Alpowa for grain yield.

PI 638568. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 608; 02CF 114. Pedigree - Stephens 2 * / Triple Dirk Vrn 2 // 5 * Stephens, 99CF 608. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 2 allele for winter habit derived from SPN. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, plant ht. NIL < SPN for grain yield (<20%); > SPN for test wt. (>12g/L).

PI 638569. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 615; 02CF 115. Pedigree - Stephens 2 * / Triple Dirk Vrn 2 // 5 * Stephens, 99CF 615. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 2 allele for winter habit derived from SPN. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, kernel hardness, kernel wt., protein %, and sedimentation value; < SPN for test wt., (<27 g/L), plant ht. (< 9%), grain yield (<22%).

PI 638570. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 620; 02CF 116. Pedigree - Stephens 2 * / Triple Dirk Vrn 2 // 5 * Stephens, 99CF 620. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 2 allele for winter habit derived from SPN. SPN (is a white winter bearded Rht 1 semidwarf with large (48 mg)

kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, test wt., kernel hardness, kernel wt., protein %, and sedimentation value; < SPN for grain yield (<21%) and plant ht. (<10%).

PI 638571. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 621; 02CF 117. Pedigree - Stephens 2 * / Triple Dirk Vrn 2 // 5 * Stephens, 99CF 621. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 2 allele for winter habit derived from SPN. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, plant ht., grain yield, kernel hardness, kernel wt., protein %, and sedimentation value; < SPN for test wt. (<18g/L).

PI 638572. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 627; 02CF 118. Pedigree - Stephens 2 * / Triple Dirk Vrn 2 // 5 * Stephens, 99CF 627. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 2 allele for winter habit derived from SPN. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, plant ht., grain yield, kernel hardness, protein %; < SPN for kernel wt. (<10mg) and test wt. (<26g/L). NIL > SPN for sedimentation value (13 vs. 7).

PI 638573. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 630; 02CF 120. Pedigree - Stephens 2 * / Triple Dirk VRN 3 // 5 * Stephens, 99CF 630. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having Vrn 3 allele for spring habit derived from Triple Dirk Vrn 3 NIL. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) soft kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for heading date, test wt., kernel hardness, protein % and sedimentation value; NIL < SPN for grain yield (<25%), plant ht. (<12%), survival (<15%) and kernel wt. (<12mg). From spring planting test wt. and plant hvalues by 3 and 7%, respectively; spring and fall-sown grain yields similar. Heads 12d later than spring check cv. (Alpowa) and equal to Alpowa for grain yield.

PI 638574. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 633; 02CF 121. Pedigree - Stephens 2 * / Triple Dirk VRN 3 // 5 * Stephens, 99CF 633. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having Vrn 3 allele for spring habit derived from Triple Dirk Vrn 3 NIL. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) soft kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, test wt., grain yield, kernel hardness, kernel wt., protein % and sedimentation value; NIL < SPN for plant ht. (<10%). From spring planting grain yield, test wt. < fall-sown values by 18 and 3tively but similar for plant ht. Heads 12d later than spring check cv. (Alpowa) and equal to Alpowa for grain yield.

PI 638575. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 634; 02CF 122. Pedigree - Stephens 2 * / Triple Dirk VRN 3 // 5 * Stephens, 99CF 634. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having Vrn 3 allele for spring habit derived from Triple Dirk Vrn 3 NIL. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) soft kernels. NIL phenotypically similar to SPN. From fall

planting NIL similar to SPN for survival, heading date, test wt., kernel hardness, kernel wt., protein % and sedimentation value; NIL < SPN for grain yield (<30%), test wt. (<13g/L), and plant ht. (<13%). From spring planting grain yield, test w. similar to fall-sown values. Heads 12d later than spring check cv. (Alpowa) and equal to Alpowa for grain yield.

PI 638576. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 635; 02CF 123. Pedigree - Stephens 2 * / Triple Dirk VRN 3 // 5 * Stephens, 99CF 635. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having Vrn 3 allele for spring habit derived from Triple Dirk Vrn 3 NIL. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) soft kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, test wt., kernel hardness, kernel wt., protein % and sedimentation value; NIL < SPN for grain yield (<35%), plant ht. (<14%). From spring planting grain yield, plant ht. equal to fall-sown val wt. < 6%. Heads 12d later than spring check cv. (Alpowa) and equal to Alpowa for grain yield.

PI 638577. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 02CF 124. Pedigree - Stephens 2 * / Triple Dirk VRN 3 // 5 * Stephens, 02CF 124. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having Vrn 3 allele for spring habit derived from Triple Dirk Vrn 3 NIL. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) soft kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival and heading date. NIL < SPN for grain yield (<26%), test wt. (<18g/L), and plant ht. (<10%). From spring planting grain yield, test wt. equal to fall-sown values; plant ht. (<9%). Heads 12d later than. (Alpowa) and equal to Alpowa for grain yield.

PI 638578. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 639; 02CF 126. Pedigree - Stephens 2 * / Triple Dirk Vrn 3 // 5 * Stephens, 99CF 639. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 3 allele for winter habit derived from SPN. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg)kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, test wt., kernel hardness, kernel wt., protein %, and sedimentation value; < SPN for grain yield (<17%), plant ht. (<12%).

PI 638579. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 641; 02CF 127. Pedigree - Stephens 2 * / Triple Dirk Vrn 3 // 5 * Stephens, 99CF 641. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 3 allele for winter habit derived from SPN. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, plant ht., grain yield, kernel hardness, kernel wt., protein %, and sedimentation value; < SPN for test wt. (<33g/L).

PI 638580. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 642; 02CF 128. Pedigree - Stephens 2 * / Triple Dirk Vrn 3 // 5 * Stephens, 99CF 642. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 3 allele for winter habit derived from SPN. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, plant ht., grain yield, kernel hardness, kernel wt., protein %, sedimentation value and test wt.

PI 638581. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 643; 02CF 129. Pedigree - Stephens 2 * / Triple Dirk Vrn 3 // 5 * Stephens, 99CF 643. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 3 allele for winter habit derived from SPN. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, plant ht., test wt., grain yield, kernel hardness, kernel wt., protein %, sedimentation value.

PI 638582. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 645; 02CF 130. Pedigree - Stephens 2 * / Triple Dirk Vrn 3 // 5 * Stephens, 99CF 645. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 3 allele for winter habit derived from SPN. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, test wt., grain yield, kernel hardness, kernel wt., protein %, sedimentation value; NIL > SPN for plant ht (>6%).

PI 638583. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 650; 02CF 132. Pedigree - Stephens 2 * / Triple Dirk VRN 4 // 5 * Stephens, 99CF 650. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having Vrn 4 allele for spring habit derived from Triple Dirk Vrn 4 NIL. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) soft kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, test wt., grain yield, plant ht., kernel wt., protein %, sedimentation value; kernel hardness of NIL > SPN (26 vs. 16 units). From spring planting grain yield, test wt., equal to fall-sown values bulant ht. < 15%. Heads 11d later than spring check cv. (Alpowa). NIL grain yield > Alpoqa (>18%).

PI 638584. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 656; 02CF 133. Pedigree - Stephens 2 * / Triple Dirk VRN 4 // 5 * Stephens, 99CF 656. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having Vrn 4 allele for spring habit derived from Triple Dirk Vrn 4 NIL. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) soft kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, plant ht., grain yield, kernel hardness, kernel wt., protein %, sedimentation value; test wt. of NIL > SPN (>19g/L). From spring planting grain yield similar to fall-sown values; test wt. and pla < fall-sown values by 5 and 22%, respectively. Heads 9d later than spring check cv. (Alpowa). NIL grain yield > Alpoqa (>20%).

PI 638585. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 660; 02CF 134. Pedigree - Stephens 2 * / Triple Dirk VRN 4 // 5 * Stephens, 99CF 660. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having Vrn 4 allele for spring habit derived from Triple Dirk Vrn 4 NIL. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) soft kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for heading date, test wt.,kernel hardness, kernel wt., protein %, sedimentation value; NIL < SPN for plant ht (<12%), grain yield (<14%) and survival (<47%). From spring planting test wt. and plant ht. < fall-sownd 7%, respectively; grain yields were similar. Heads 10d later than spring check cv. (Alpowa). NIL grain yield 17% > Alpoqa.

PI 638586. *Triticum aestivum* L. *subsp. aestivum*
Genetic. Pureline. 99CF 663; 02CF 135. Pedigree - Stephens 2 * / Triple Dirk VRN 4 // 5 * Stephens, 99CF 663. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having Vrn 4 allele for spring habit derived from Triple Dirk Vrn 4 NIL. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) soft kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for heading date, plant ht., test wt., grain yield, kernel hardness, protein %, sedimentation value; kernel wt. of NIL 7mg > SPN and survival was 31% < SPN. From spring planting grain yield, test wt. and plant ht. < fallues by 11 and 5 and 20%, respectively. Heads 9d later than spring check cv. (Alpowa). NIL similar to Alpoqa for grain yield.

PI 638587. *Triticum aestivum* L. *subsp. aestivum*
Genetic. Pureline. 99CF 670; 02CF 136. Pedigree - Stephens 2 * / Triple Dirk VRN 4 // 5 * Stephens, 99CF 670. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having Vrn 4 allele for spring habit derived from Triple Dirk Vrn 4 NIL. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) soft kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for heading date, plant ht., protein %, sedimentation value; NIL < SPN for test wt. (<13g/L) and survival (<38%). From spring planting test wt. and plant ht. < fall-sown values by 4 and 12%, respectively; grain yieldsr. Heads 7d later than spring check cv. (Alpowa). NIL similar to Alpoqa for grain yield.

PI 638588. *Triticum aestivum* L. *subsp. aestivum*
Genetic. Pureline. 99CF 653; 02CF 138. Pedigree - Stephens 2 * / Triple Dirk Vrn 4 // 5 * Stephens, 99CF 653. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 4 allele for winter habit derived from SPN. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for heading date, plant ht., grain yield, kernel hardness, kernel wt., protein %, sedimentation value; NIL > SPN for test wt. (>44g/L) and survival (>23%).

PI 638589. *Triticum aestivum* L. *subsp. aestivum*
Genetic. Pureline. 99CF 658; 02CF 139. Pedigree - Stephens 2 * / Triple Dirk Vrn 4 // 5 * Stephens, 99CF 658. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 4 allele for winter habit derived from SPN. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, plant ht., grain yield, test wt., kernel wt., protein %, sedimentation value and kernel hardness.

PI 638590. *Triticum aestivum* L. *subsp. aestivum*
Genetic. Pureline. 99CF 665; 02CF 140. Pedigree - Stephens 2 * / Triple Dirk Vrn 4 // 5 * Stephens, 99CF 665. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 4 allele for winter habit derived from SPN. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, plant ht., test wt., grain yield, kernel hardness, kernel wt., protein %, sedimentation value.

PI 638591. *Triticum aestivum* L. *subsp. aestivum*
Genetic. Pureline. 99CF 666; 02CF 141. Pedigree - Stephens 2 * / Triple Dirk Vrn 4 // 5 * Stephens, 99CF 666. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 4 allele for winter habit derived from SPN.

SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, plant ht., test wt., grain yield, kernel hardness, kernel wt., protein %, sedimentation value.

PI 638592. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 671; 02CF 142. Pedigree - Stephens 2 * / Triple Dirk Vrn 4 // 5 * Stephens, 99CF 671. BC6 F5:8 near-isoline (NIL) of Stephens (SPN) having vrn 4 allele for winter habit derived from SPN. SPN is a white winter bearded Rht 1 semidwarf with large (48 mg) kernels. NIL phenotypically similar to SPN. From fall planting NIL similar to SPN for survival, heading date, plant ht., test wt., grain yield, kernel hardness, kernel wt., protein %, sedimentation value.

The following were developed by Carmen Asensio-Vegas, ITACyL (JUNTA DE CASTILLA Y LEON), CTRA, BURGOS KM, 119, FINCA ZAMADUENAS, Valladolid, Spain; M.C. Asensio S-Manzanera, ITACyL (Junta de Castilla y Leon, Ctra. Burgos Km. 119, 47071, Valladolid, Spain; R. Lopez, ITACyL, Instituto Tecnologico Agrario de Castilla y Leon, Ctra. Burgos Km. 119, 47071, Valladolid, Spain. Received 03/15/2005.

PI 638593. Phaseolus vulgaris L.
Cultivar. Pureline. "ALMONGA". CV-243. Pedigree - ZJ-724/4J-132-1_92. A white, large dry bean of "planchada" market class. A high culinary quality cultivar with resistance to halo blight, Bean common mosaic virus, and Bean common mosaic necrosis virus. Was tested in replicated yield trials in 5 locations in Spain during 5 years; mean seed yield was 2976 kg/ha compared to 1719 kg/ha for Cueto (is a white kidney selection form a landrace). Bloomed in an average of 50 d and matured in 102 d after planting. Indeterminate prostrate growth habit Type IIIb, dull green leaves and white flowers, with pods 170 mm-long and an average of 5 seeds per pod. Has rhombohedric, shiny white seeds, high culinary quality with very soft tegument and highly buttery albumen.

The following were developed by Fred Allen, University of Tennessee, Department of Plant Scince, 2431 Joe Johnson Drive, Knoxville, Tennessee 37996, United States; D.R. Kincer, University of Tennessee, Dept. of Plant and Soil Sciences, Knoxville, Tennessee 37901-1071, United States; Dennis West, University of Tennessee, Department of Plant Sciences, 350 Plant Sciences, Knoxville, Tennessee 37996-4562, United States; M.A. Thompson, University of Tennessee, Dept. of Plant Sciences, Knoxville, Tennessee 37996-4562, United States. Donated by Dennis West, University of Tennessee, Department of Plant Sciences, 350 Plant Sciences, Knoxville, Tennessee 37996-4562, United States. Received 03/11/2005.

PI 638594. Zea mays L. **subsp. mays**
Breeding. Inbred. T175. PL-326. Pedigree - T167/T173-F2-S7. Produces a large ear with 12 rows of medium sized, white kernels on a white cob. Heat units to pollen shed were 1572. Plant and ear height were 1.97 and 0.94 m. Produces 5 leaves above the top ear-bearing node. The tassel has 6 to 10 lateral branches and a central spike. Has yellow anthers and green silks, turning sun-red after emergence. Flower synchronization is good with silks usually emerging one or two days after the onset of pollen shed. The plants produce a few brace roots to the 2nd node above the crown.

The following were collected by Gyuhwa Chung, Yosu National University, Dept. of Biotech., Yosu, Cholla Nam 550-749, Korea, South. Received 03/23/2005.

PI 638595. Glycine max (L.) Merr.
Landrace. Pureline. SY 508001. Collected 03/23/2005 in Kyongsang Nam, Korea, South. Latitude 34° 50' N. Longitude 127° 53' E. Namhae Island.

PI 638596. Glycine max (L.) Merr.
Landrace. Pureline. SY 508002. Collected 03/23/2005 in Kyongsang Nam, Korea, South. Latitude 34° 50' N. Longitude 127° 53' E. Namhae Island.

PI 638597. Glycine max (L.) Merr.
Landrace. Pureline. SY 508003. Collected 03/23/2005 in Kyongsang Nam, Korea, South. Latitude 34° 50' N. Longitude 127° 53' E. Town of Jangsoo on Namhae Island.

PI 638598. Glycine max (L.) Merr.
Landrace. Pureline. SY 508004. Collected 03/23/2005 in Cholla Nam, Korea, South. Latitude 34° 37' N. Longitude 127° 45' E. Dolsan Island.

PI 638599. Glycine max (L.) Merr.
Landrace. Pureline. SY 508005. Collected 03/23/2005 in Cholla Nam, Korea, South. Latitude 34° 37' N. Longitude 127° 45' E. Dolsan Island.

PI 638600. Glycine max (L.) Merr.
Landrace. Pureline. SY 508006. Collected 03/23/2005 in Cholla Nam, Korea, South. Latitude 34° 37' N. Longitude 127° 45' E. Dolsan Island.

PI 638601. Glycine max (L.) Merr.
Landrace. Pureline. SY 508007. Collected 03/23/2005 in Cholla Nam, Korea, South. Latitude 34° 37' N. Longitude 127° 45' E. Dolsan Island.

PI 638602. Glycine max (L.) Merr.
Landrace. Pureline. SY 508008. Collected 03/23/2005 in Cholla Nam, Korea, South. Yegyo.

PI 638603. Glycine max (L.) Merr.
Landrace. Pureline. SY 508009. Collected 03/23/2005 in Cholla Nam, Korea, South. Yegyo.

PI 638604. Glycine max (L.) Merr.
Landrace. Pureline. SY 508010. Collected 03/23/2005 in Cholla Nam, Korea, South. Yegyo.

PI 638605. Glycine max (L.) Merr.
Landrace. Pureline. SY 508011. Collected 03/23/2005 in Cholla Nam, Korea, South. SC1-Kim, Wando.

PI 638606. Glycine max (L.) Merr.
Landrace. Pureline. SY 508012. Collected 03/23/2005 in Cholla Nam, Korea, South. SC2-Jun, Wando.

PI 638607. Glycine max (L.) Merr.
Landrace. Pureline. SY 508013. Collected 03/23/2005 in Cholla Nam, Korea, South. BY1-Ko, Wando.

PI 638608. Glycine max (L.) Merr.
Landrace. Pureline. SY 508014. Collected 03/23/2005 in Cholla Nam, Korea, South. BY2-Kim03. Lipoxygenease-3 isozyme mutant showing low beany flavor. Cultivated by Kim over 100 years.

PI 638609. Glycine max (L.) Merr.
Landrace. Pureline. SY 508015. Collected 03/23/2005 in Cholla Nam, Korea, South. BY2-Kim04, Wando.

PI 638610. Glycine max (L.) Merr.
Landrace. Pureline. SY 508016. Collected 03/23/2005 in Cholla Nam, Korea, South. BY3-Park, Wando.

PI 638611. Glycine max (L.) Merr.
Landrace. Pureline. SY 508017. Collected 03/23/2005 in Cholla Nam, Korea, South. JJ1-Sim, Wando. Lipoxygenease-3 isozyme mutant showing very low beany flavor. Cultivated by Sim over 100 years.

PI 638612. Glycine max (L.) Merr.
Landrace. Pureline. SY 508018. Collected 03/23/2005 in Cholla Nam, Korea, South. JJ2-Kim, Wando.

PI 638613. Glycine max (L.) Merr.
Landrace. Pureline. SY 508019. Collected 03/23/2005 in Cholla Nam, Korea, South. JJ3-Park, Wando.

PI 638614. Glycine max (L.) Merr.
Landrace. Pureline. SY 508020. Collected 03/23/2005 in Cholla Nam, Korea, South. Chungbyuk-Chung, Wando. Lipoxygenease-3 isozyme mutant showing very low beany flavor. Cultivated by Chung over 100 years.

PI 638615. Glycine max (L.) Merr.
Landrace. Pureline. SY 508021. Collected 03/23/2005 in Kangwon, Korea, South. Collected in Wando, but came from Kangwon.

The following were developed by K. B. Singh, Int. Center For Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria; R.S. Malhotra, Int. Center for Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria; A.M. Nassif, GCSAR, P.O. Box 113, Douma, Damascus, Syria; G. Khalaf, ICARDA, Integrated Gene Management Program, P.O. Box 5466, Aleppo, Syria. Received 03/21/2005.

PI 638616. Cicer arietinum L.
Cultivar. Pureline. "Ghab 4"; FLIP 93-93C. CV-245. Pedigree - (FLIP 85-122C / FLIP 82-150C) // FLIP 86-77C. Released for general cultivation in winter in Zone 1 (with rainfall range of 350-600 mm) and Zone 2 (with rainfall range 250-350mm) in Syria. Produces taller plants (mean plant height of 68cm) suitable for mechanical harvesting. 119 d to flower and

158 d to mature; it is tolerant to Ascochyta blight. Seeds are ram-head shaped, beige colored, weigh 35.5 g/100 seeds and are typically Kabuli type. The quality of Hummos bi-tehineh prepared from this cultivar is very good with rating 4 on 1-5 scale (1=very poor, 5=Excellent). Sowing in winter results in earlier harvesting (at least 2-3 weeks) and higher seed yield than the traditionally spring-sown crop.

PI 638617. Cicer arietinum L.
Cultivar. Pureline. "Ghab 5"; FLIP 88-85C. CV-246. Pedigree - ILC 629 x FLIP 82-144C. Released for general cultivation as a winter-sown cultivar/variety in Zone 1 (with rainfall range of 350-600mm) and Zone 2 (with rainfall range 250-350mm) in Syria. Possesses taller plants (mean plant height of 55 cm) suitable for mechanical harvesting; if planted in winter, takes 125 d to flower and 168 d to mature. It is tolerant to Ascochyta blight. Seeds ram-head shaped, beige colored, 35 g/100 seed in wt., and are Kabuli type. The quality of Hummos bi-tehineh prepared from this cultivar is very good, with rating 4 on 1-5 scale (1=very poor, 5=excellent). Sowing in winter results in earlier harvesting and higher seed yield than the traditionally spring-sown crop.

The following were developed by R.S. Malhotra, Int. Center for Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria; S.H. Sabaghpour, Dryland Agricultural Research Institute, Food Legume Department, P.O. Box 67145 - 1164, Kermanshah, Iran; T. Banai, Seed and Plant Improvement Institute, P.O. Box 31585 - 4119, Karaj, Iran. Received 03/21/2005.

PI 638618. Cicer arietinum L.
Cultivar. Pureline. "Hashem"; FLIP 84-48C. CV-244. Pedigree - ILC 1920 x ILC 2956. A kabuli chickpea developed by ICARDA and released by the Seed and Plant Improvement Institute, Karaj, Iran, for commercial cultivation in the Mediterranean area of Iran in 1997. Resistant to Ascochyta blight, has erect and tall plants (mean plant height 80 cm), produces first pod-bearing node at about 20 cm above the ground level, and is suitable for mechanized harvesting. Plants possess green stem, white flowers, and non-pigmented pods. Plant on an average bears 20 pods, 1.3 and seeds per pod. Seeds are beige in color, owl's head shaped and weigh 35 g 100-1 seeds with 27.1 percent protein. 158 days to flower and 185 days to mature when winter planted.

The following were developed by W. Erskine, Int. Center for Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria; A. Sarker, Int. Center for Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria; S.H. Sabaghpour, Dryland Agricultural Research Institute, Food Legume Department, P.O. Box 67145 - 1164, Kermanshah, Iran; M. Safikhani, Dryland Agricultural Research Institute, Maragheh, Iran. Received 03/18/2005.

PI 638619. Lens culinaris Medik. **subsp. culinaris**
Cultivar. Pureline. "Gachsaran". CV-28;. Pedigree - ILL 4349 x ILL 4605. Semi-erect and medium-statured variety measuring an average height of 36 cm. It flowers in 93 d and attains physiological maturity in 137 d, earlier than traditional varities. Green testa color without pattern, seed weight is 4.7g/100 seed, heavier than local cultivars. One of the important characteristics is that it has high protein content. Cooking quality is excellent, taking 20 min. to cook. The cultivar has combined tolerance to both Fusarium wilt and Ascochyta blight diseases.

The following were developed by Robert E. Allan, USDA-ARS, Dept. of Crop & Soil Science, 209 Johnson Hall, Pullman, Washington 99164, United States. Received 03/03/2005.

PI 638620. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 761; 02CF 144. Pedigree - Wanser 2 * / Triple Dirk VRN 1 // 5 * Wanser, 99CF 761. BCL F5:8 near-isoline (NIL) of Wanser (WNS) having VRN 1 allele for spring habit derived from Triple Dirk VRN 1 NIL. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for plant ht., grain yield, test wt., % stand, kernel hardness, protein %, sedimentation value. NIL has kernels 9mg > WNS and 3 d later heading date. From spring planting NIL had similar plant ht. and test wto its fall-sown values. Spring-sown grain yield > fall-sown (>44%) and > check cv. Alpowa (>20%); heads 4 d later than Alpowa.

PI 638621. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 776; 02CF 145. Pedigree - Wanser 2 * / Triple Dirk VRN 1 // 5 * Wanser, 99CF 776. BCL F5:8 near-isoline (NIL) of Wanser (WNS) having VRN 1 allele for spring habit derived from Triple Dirk VRN 1 NIL. WNS (CI 13844) is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for plant ht., grain yield, % stand, kernel hardness, sedimentation value. NIL < WNS for test wt. (< 45g/L), protein % (12.2 vs 14.0%) and 4 d later heading than WNS. From spring planting value similar to those for fall planting for plant ht., test wt. and grain yield. NIL was 5 d later heading than spring check cv. Alpowa and had similar grain yield to Alpowa.

PI 638622. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 768; 02CF 146. Pedigree - Wanser 2 * / Triple Dirk VRN 1 // 5 * Wanser, 99CF 768. BCL F5:8 near-isoline (NIL) of Wanser (WNS) having VRN 1 allele for spring habit derived from Triple Dirk VRN 1 NIL. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., kernel hardness, kernel wt., protein %, sedimentation value; < WNS for grain yield (<16%), stand % (<31%), and test wt. (<32g/L). From spring planting NIL had values sim-sown values test wt. and plant ht.; grain yield > fall-sown yield (>61%) and 17% > spring check cv. Alpowa. NIL heads 3 d later than Alpowa.

PI 638623. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 769; 02CF 147. Pedigree - Wanser 2 * / Triple Dirk VRN 1 // 5 * Wanser, 99CF 769. BCL F5:8 near-isoline (NIL) of Wanser (WNS) having VRN 1 allele for spring habit derived from Triple Dirk VRN 1 NIL. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for kernel hardness, kernel wt., % protein, sedimentation value; NIL < WNS for grain yield (<25%), stand % (<28%), and test wt. (<41g/L). From spring planting plant ht. and test wt. were similar to lues. Spring-sown grain yield was > fall-

sown yield by (>79%) and exceeded spring check cv Alpowa by 16%. NIL heads 4 d later and 10% > WNS for plant ht.

PI 638624. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 774; 02CF 148. Pedigree - Wanser 2 * / Triple Dirk VRN 1 // 5 * Wanser, 99CF 774. BCL F5:8 near-isoline (NIL) of Wanser (WNS) having VRN 1 allele for spring habit derived from Triple Dirk VRN 1 NIL. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, grain yield, kernel hardness, kernel wt., % protein, sedimentation value; NIL < WNS for test wt. (<32g/L) and % stand (<22%). Plant ht. of NIL > WNS (>9%). From spring plantinglant ht. values were similar to fall-sown values. Spring-sown grain yield was > fall-sown yield by (>17%) but similar to spring check cv Alpowa. NIL heads 5 d later than Alpowa.

PI 638625. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 765; 02CF 150. Pedigree - Wanser 2 * / Triple Dirk Vrn 1 // 5 * Wanser, 99CF 765. BC6 F5:8 near-isoline (NIL) of Wanser (WNS) having vrn 1 allele for winter habit derived from WNS. WNS (is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., stand %, kernel hardness, kernel wt., protein %, and sedimentation value; NIL < WNS for grain yield (<16%) and test wt. (<30g/L).

PI 638626. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 771; 02CF 151. Pedigree - Wanser 2 * / Triple Dirk Vrn 1 // 5 * Wanser, 99CF 771. BC6 F5:8 near-isoline (NIL) of Wanser (WNS) having vrn 1 allele for winter habit derived from WNS. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for grain yield, % stand, kernel hardness, kernel wt., protein %, and sedimentation value; NIL > WNS for plant ht. (>9%), and < WNS for test wt. (<23g/L). NIL later heading than WNS (3 d).

PI 638627. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 772; 02CF 152. Pedigree - Wanser 2 * / Triple Dirk Vrn 1 // 5 * Wanser, 99CF 772. BC6 F5:8 near-isoline (NIL) of Wanser (WNS) having vrn 1 allele for winter habit derived from WNS. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., grain yield, test wt., % stand, kernel hardness, kernel wt., protein %, and sedimentation value.

PI 638628. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 778; 02CF 153. Pedigree - Wanser 2 * / Triple Dirk Vrn 1 // 5 * Wanser, 99CF 778. BC6 F5:8 near-isoline (NIL) of Wanser (WNS) having vrn 1 allele for winter habit derived from WNS. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for plant ht., grain yield, test wt., % stand, kernel hardness, sedimentation value. NIL < WNS for kernel wt. (< 7mg) and protein % (12.4 vs. 14.0%). NIL 3d later heading than WNS.

PI 638629. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 779; 02CF 154. Pedigree - Wanser 2 * / Triple Dirk Vrn 1 // 5 * Wanser, 99CF 779. BC6 F5:8 near-isoline (NIL) of Wanser (WNS) having vrn 1 allele for winter habit derived from WNS. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for plant ht., heading date, grain yield, test wt., % stand, kernel hardness, kernel wt., protein %, and sedimentation value.

PI 638630. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 783; 02CF 156. Pedigree - Wanser 2 * / Triple Dirk VRN 2 // 5 * Wanser, 99CF 783. BCL F5:8 near-isoline (NIL) of Wanser (WNS) having VRN 2 allele for spring habit derived from Triple Dirk VRN 2 NIL. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, grain yield, test wt., % stand, kernel hardness, kernel wt., % protein, and sedimentation value; plant ht of NIL > WSN (>22%). Values from spring planting were < fall-sown values for gd (<23%) and plant ht. (<19%). NIL heads 10 d later than spring check cv. Alpowa and its grain yield 19% < Alpowa.

PI 638631. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 784; 02CF 157. Pedigree - Wanser 2 * / Triple Dirk VRN 2 // 5 * Wanser, 99CF 784. BCL F5:8 near-isoline (NIL) of Wanser (WNS) having VRN 2 allele for spring habit derived from Triple Dirk VRN 2 NIL. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, test wt., % stand, kernel hardness, kernel wt., % protein, and sedimentation value; NIL > WNS for plant ht. (>15%) and grain yield (>23%). Spring-sown NIL values < fall-sown values (<12%) and grain yield (<16%); test wt. for spring and fall-sown values were similar. NIL spring-sown grain yield < spring check cv. Alpowa (<11%). NIL heads 10 d later than Alpowa.

PI 638632. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 795; 02CF 159. Pedigree - Wanser 2 * / Triple Dirk VRN 2 // 5 * Wanser, 99CF 795. BCL F5:8 near-isoline (NIL) of Wanser (WNS) having VRN 2 allele for spring habit derived from Triple Dirk VRN 2 NIL. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., grain yield, % stand, kernel hardness, kernel wt., % protein, sedimentation value; test wt. of NIL > WNS (>21g/L). Spring-sown NIL values < fall-sown values for test wt. (&lfall-sown values for grain yield (>27%) and similar for plant ht. NIL heads 6 d later than spring check cv, Alpowa with similar grain yield to Alpowa.

PI 638633. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 796; 02CF 160. Pedigree - Wanser 2 * / Triple Dirk VRN 2 // 5 * Wanser, 99CF 796. BCL F5:8 near-isoline (NIL) of Wanser (WNS) having VRN 2 allele for spring habit derived from Triple Dirk VRN 2 NIL. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant

ht., grain yield, kernel hardness, kernel wt., % stand, % protein, sedimentation value; NIL < WNS for test wt. (<20g/L). Spring-sown NIL values similar to fall-sown values for planand test wt. Spring-sown grain yield > fall-sown values (>27%) and similar to spring check cv, Alpowa. Heads 2d later than Alpowa.

PI 638634. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 786; 02CF 162. Pedigree - Wanser 2 * / Triple Dirk Vrn 2 // 5 * Wanser, 99CF 786. BC6 F5:8 near-isoline (NIL) of Wanser (WNS) having vrn 2 allele for winter habit derived from WNS. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for plant ht., grain yield, test wt., % stand, kernel hardness, kernel wt., % protein, and sedimentation value. NIL heads 3d later than WNS.

PI 638635. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 788; 02CF 163. Pedigree - Wanser 2 * / Triple Dirk Vrn 2 // 5 * Wanser, 99CF 788. BC6 F5:8 near-isoline (NIL) of Wanser (WNS) having vrn 2 allele for winter habit derived from WNS. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., grain yield, test wt., % stand, kernel hardness, kernel wt., % protein and sedimentation value.

PI 638636. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 794; 02CF 164. Pedigree - Wanser 2 * / Triple Dirk Vrn 2 // 5 * Wanser, 99CF 794. BC6 F5:8 near-isoline (NIL) of Wanser (WNS) having vrn 2 allele for winter habit derived from WNS. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., grain yield, test wt., % stand, kernel hardness, kernel wt., % protein and sedimentation value.

PI 638637. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 798; 02CF 165. Pedigree - Wanser 2 * / Triple Dirk Vrn 2 // 5 * Wanser, 99CF 798. BC6 F5:8 near-isoline (NIL) of Wanser (WNS) having vrn 2 allele for winter habit derived from WNS. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., test wt., % stand, % protein and sedimentation value. Grain yield of NIL > WNS (>22%). NIL kernel hardness softer than WNS (62 vs 75) and its kernel wt. < WNS (<5mg).

PI 638638. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 800; 02CF 166. Pedigree - Wanser 2 * / Triple Dirk Vrn 2 // 5 * Wanser, 99CF 800. BC6 F5:8 near-isoline (NIL) of Wanser (WNS) having vrn 2 allele for winter habit derived from WNS. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., grain yield, test wt. % stand, kernel wt., % protein and sedimentation value. NIL kernel hardness < WNS (66 vs 75).

PI 638639. *Triticum aestivum* L. *subsp. aestivum*
Breeding. Pureline. 99CF 802; 02CF 168. Pedigree - Wanser 2 * / Triple Dirk VRN 3 // 5 * Wanser, 99CF 802. BCL F5:8 near-isoline (NIL) of Wanser (WNS) having VRN 3 allele for spring habit derived from Triple Dirk VRN 3 NIL. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, grain yield, test wt., plant ht., kernel hardness, kernel wt., % protein and sedimentation value; % stand of NIL 10% < WNS. Spring-sown NIL values similar to fall-sown values for plant ht., t wt; spring-sown grain yield 29% > fall-sown yield and similar to grain yield of spring check cv. Alpowa. NIL heads 1 d later than Alpowa.

PI 638640. *Triticum aestivum* L. *subsp. aestivum*
Breeding. Pureline. 99CF 807; 02CF 169. Pedigree - Wanser 2 * / Triple Dirk VRN 3 // 5 * Wanser, 99CF 807. BCL F5:8 near-isoline (NIL) of Wanser (WNS) having VRN 3 allele for spring habit derived from Triple Dirk VRN 3 NIL. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., grain yield, % stand, kernel hardness, kernel wt., % protein and sedimentation value; NIL test wt < WNS (<23g/L). Spring-sown values similar to fall-sown values for plant ht. wt; spring-sown grain yield 18% > fall-sown yield and similar to grain yield of spring check cv. Alpowa. NIL heads 6 d later than Alpowa.

PI 638641. *Triticum aestivum* L. *subsp. aestivum*
Breeding. Pureline. 99CF 814; 02CF 170. Pedigree - Wanser 2 * / Triple Dirk VRN 3 // 5 * Wanser, 99CF 814. BCL F5:8 near-isoline (NIL) of Wanser (WNS) having VRN 3 allele for spring habit derived from Triple Dirk VRN 3 NIL. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., test wt., % stand, kernel wt., % protein and sedimentation value; NIL < WNS for grain yield (<13%) and kernel hardness (60 vs 75). Spring-sown NIL values similar to fall-sown for plant ht., test wt; but > fall value for grain yield (>35%); NIL spring-sown grain yield similar to yield of spring check cv. Alpowa. Heads 6d later than Alpowa.

PI 638642. *Triticum aestivum* L. *subsp. aestivum*
Breeding. Pureline. 99CF 816; 02CF 171. Pedigree - Wanser 2 * / Triple Dirk VRN 3 // 5 * Wanser, 99CF 816. BCL F5:8 near-isoline (NIL) of Wanser (WNS) having VRN 3 allele for spring habit derived from Triple Dirk VRN 3 NIL. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., grain yield, test wt., % stand, kernel hardness, kernel wt., % protein and sedimentation value. NIL spring-sown values similar to fall-sown values for plant ht. Spring-sown grain yield > fall-sown yield (>15%) and < fall-sown test wt. (<21g/L). Spring-sown grain yield similar to spring check cv. Alpowa. Heads 8d later than Alpowa.

PI 638643. *Triticum aestivum* L. *subsp. aestivum*
Breeding. Pureline. 99CF 806; 02CF 174. Pedigree - Wanser 2 * / Triple Dirk Vrn 3 // 5 * Wanser, 99CF 806. BC6 F5:8 near-isoline (NIL) of Wanser (WNS) having vrn 3 allele for winter habit derived from WNS. WNS is a hard red winter bearded brown chaff midtall cv. with hard red

mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., grain yield, test wt., kernel hardness, kernel wt., % protein, sedimentation value and % stand.

PI 638644. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 810; 02CF 175. Pedigree - Wanser 2 * / Triple Dirk Vrn 3 // 5 * Wanser, 99CF 810. BC6 F5:8 near-isoline (NIL) of Wanser (WNS) having vrn 3 allele for winter habit derived from WNS. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., test wt., kernel hardness, kernel wt., % protein, sedimentation value and % stand. NIL < WNS for grain yield (<12%).

PI 638645. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 817; 02CF 176. Pedigree - Wanser 2 * / Triple Dirk Vrn 3 // 5 * Wanser, 99CF 817. BC6 F5:8 near-isoline (NIL) of Wanser (WNS) having vrn 3 allele for winter habit derived from WNS. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., grain yield, % stand, kernel hardness, kernel wt., % protein, and sedimentation value. NIL < WNS for test wt. (<36g/L).

PI 638646. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 818; 02CF 177. Pedigree - Wanser 2 * / Triple Dirk Vrn 3 // 5 * Wanser, 99CF 818. BC6 F5:8 near-isoline (NIL) of Wanser (WNS) having vrn 3 allele for winter habit derived from WNS. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., % stand, % protein, and sedimentation value. NIL < WNS for grain yield (<43%), test wt. (<31g/L), kernel hardness (60 vs 75), and kernel wt. (< 5mg).

PI 638647. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 822; 02CF 178. Pedigree - Wanser 2 * / Triple Dirk Vrn 3 // 5 * Wanser, 99CF 822. BC6 F5:8 near-isoline (NIL) of Wanser (WNS) having vrn 3 allele for winter habit derived from WNS. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for % stand, kernel hardness, % protein, and sedimentation value. NIL < WNS for grain yield (<19%), plant ht. (<12%), test wt. (<36g/L), and kernel wt. (< 6mg). NIL 4 d later heading than WNS.

PI 638648. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 828; 02CF 180. Pedigree - Wanser 2 * / Triple Dirk VRN 4 // 5 * Wanser, 99CF 828. BCL F5:8 near-isoline (NIL) of Wanser (WNS) having VRN 4 allele for spring habit derived from Triple Dirk VRN 4 NIL. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., grain yield, test wt., % stand, kernel hardness, kernel wt., % protein, and sedimentation value. NIL spring-sown plant ht., test wt., values similar to fall-sown values. Spring-sown grain yield > fall-sown

yield (>35%). NIL grain yield > that of spring check cv. Alpowa (>10%). NIL heads 6 d later than Alpowa.

PI 638649. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 834; 02CF 181. Pedigree - Wanser 2 * / Triple Dirk VRN 4 // 5 * Wanser, 99CF 834. BCL F5:8 near-isoline (NIL) of Wanser (WNS) having VRN 4 allele for spring habit derived from Triple Dirk VRN 4 NIL. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., test wt., % stand, kernel hardness, kernel wt., % protein, and sedimentation value. NIL grain yield < WNS (<21%). NIL spring-sown values for plant ht. and test wt. similar tosown values. Spring-sown grain yield > fall-sown yield (>34%). Spring-sown grain yield of NIL similar to spring check cv. Alpowa. NIL heads 6 d later than Alpowa.

PI 638650. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 838; 02CF 182. Pedigree - Wanser 2 * / Triple Dirk VRN 4 // 5 * Wanser, 99CF 838. BCL F5:8 near-isoline (NIL) of Wanser (WNS) having VRN 4 allele for spring habit derived from Triple Dirk VRN 4 NIL. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., test wt., kernel hardness, % protein. NIL < WNS for grain yield < WNS (<43%), % stand (<16%) and sedimentation value (14.6 vs 18.7). Kernel wt. of NIL 6mg > WNS. ues of NIL similar to fall-sown values for plant ht., and test wt.; Spring-sown grain yield 86% > fall-sown yield. NIL has similar grain yield to spring check cv. Alpowa. NIL heads 2 d later than Alpowa.

PI 638651. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 840; 02CF 183. Pedigree - Wanser 2 * / Triple Dirk VRN 4 // 5 * Wanser, 99CF 840. BCL F5:8 near-isoline (NIL) of Wanser (WNS) having VRN 4 allele for spring habit derived from Triple Dirk VRN 4 NIL. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, test wt., kernel hardness. NIL < WNS for plant ht. (<79%); grain yield (<35%), % stand (<19%) and sedimentation value (13.9 vs 18.7). NIL > WNS for kernel wt. (>8mg) and %14.0%). Spring-sown NIL values similar to fall-sown values for plant ht., and test wt. Spring-sown grain yield > fall-sown yield (>45%) but is < spring check cv. Alpowa (<19%). NIL heads 2 d later than Alpowa.

PI 638652. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 848; 02CF 184. Pedigree - Wanser 2 * / Triple Dirk VRN 4 // 5 * Wanser, 99CF 848. BCL F5:8 near-isoline (NIL) of Wanser (WNS) having VRN 4 allele for spring habit derived from Triple Dirk VRN 4 NIL. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., grain yield, test wt., kernel hardness, kernel wt., % protein, sedimentation value; NIL % stand < WNS (<16%). NIL spring-sown values for plant ht. and test wt were similar t-sown values. Spring-sown grain yield 23% > fall-sown yield. NIL heads 3d later than spring check cv. Alpowa and had similar spring-sown grain yield.

PI 638653. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 830; 02CF 187. Pedigree - Wanser 2 * / Triple Dirk Vrn 4 // 5 * Wanser, 99CF 830. BC6 F5:8 near-isoline (NIL) of Wanser (WNS) having vrn 4 allele for winter habit derived from WNS.. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., grain yield, test wt., % stand, kernel hardness, kernel wt., % protein, sedimentation value.

PI 638654. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 836; 02CF 188. Pedigree - Wanser 2 * / Triple Dirk Vrn 4 // 5 * Wanser, 99CF 836. BC6 F5:8 near-isoline (NIL) of Wanser (WNS) having vrn 4 allele for winter habit derived from WNS.. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., test wt., % stand, kernel hardness, sedimentation value. NIL < WNS for grain yield (<20%); NIL < WNS for kernel wt. (>8mg) and % protein (15.2 vs 14.0%).

PI 638655. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 844; 02CF 189. Pedigree - Wanser 2 * / Triple Dirk Vrn 4 // 5 * Wanser, 99CF 844. BC6 F5:8 near-isoline (NIL) of Wanser (WNS) having vrn 4 allele for winter habit derived from WNS.. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for heading date, plant ht., grain yield, test wt., % stand, kernel hardness, kernel wt, % protein, sedimentation value.

PI 638656. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. 99CF 851; 02CF 190. Pedigree - Wanser 2 * / Triple Dirk Vrn 4 // 5 * Wanser, 99CF 851. BC6 F5:8 near-isoline (NIL) of Wanser (WNS) having vrn 4 allele for winter habit derived from WNS.. WNS is a hard red winter bearded brown chaff midtall cv. with hard red mid-size kernels (37mg). NIL phenotypically similar to WNS. From fall planting NIL is similar to WNS for plant ht., heading date, test wt., % stand, kernel hardness, kernel wt, % protein, sedimentation value. NIL < WNS for grain yield (<31%).

The following were donated by N. Quat Ng, International Institute of Tropical Agriculture, Oyo Road, PMB 5320, Ibadan, Oyo, Nigeria. Received 09/28/1992.

PI 638657. Vigna unguiculata (L.) Walp. **subsp. unguiculata**
TVu 13895; G-276; Grif 12240.

The following were developed by Mark J. Bassett, University of Florida, Department of Vegetable Crops, 1253 Fifield Hall, Gainesville, Florida 32611, United States. Received 03/17/2003.

PI 638658. Phaseolus vulgaris L.
Genetic. Genetic Marker 92; W6 24286. Pedigree - BC3 to 5-593 from 96-138. { [c*u] [v] }; cartridge buff seed & white flower; developed for genetic investigation of recessive red kidney material and seed coat

patterns at the complex [C] locus, including donimant [R] red colors & patterns.

PI 638659. Phaseolus vulgaris L.
Genetic. Genetic Marker 93; W6 24287. Pedigree - BC3 to 5-593 from 96-139. { [c*u] [b] [v] }; cartridge buff seed & white flowers; developed for genetic investigation of recessive red kidney material and seed coat patterns at the complex [C] locus, including dominant [R] red colors & patterns.

PI 638660. Phaseolus vulgaris L.
Genetic. Genetic Marker 94; W6 24288. Pedigree - BC3 to 5-593 from 96-70. { [b] [v*lae] }; yellow-brown seed and [v*lae] expresses a dark purple corona & pink flowers; developed to maintain the awareness that gene [v*lae] controls the black/purple corona trait.

PI 638661. Phaseolus vulgaris L.
Genetic. Genetic Marker 95; W6 24289. Pedigree - BC3 to 5-593 from 01-338. { [C] [b] [v] [rk*drv] }; dark red kidney seed color, strongly expressed red veins in wing petals due to a spontaneous mutation at the gene [rk*d] - to [rk*drv] - and acting as a fully recessive gene for red veins.

PI 638662. Phaseolus vulgaris L.
Genetic. Genetic Marker 96; W6 24290. Pedigree - BC3 to 5-593 from 99-21. { [t] [Cl] [z*sel] [b] v] }; "sellatus' pattern of partly colored seed coat in yellow-brown without circumlineatus; [Cl] backcrossed into PI 608674 = 5-593; developed for future research with other partly colored genetic stocks.

PI 638663. Phaseolus vulgaris L.
Genetic. Genetic Marker 97; W6 24291. Pedigree - BC3 to 5-593 from 01-261. { [t] [c*u] }; white seed coat in all zones but the outer margin of the corona & caruncula - a narrow band of cartridge buff- and a pattern of fine dots in the caruncula & micropyle stripe zones; a demonstration stock.

PI 638664. Phaseolus vulgaris L.
Genetic. Genetic Marker 98; W6 24292. Pedigree - BC3 to 5-593 from 95-129. { [t] [Z] [bip*ana] [Fib] }; marginata pattern of partly colored seed, the effect of [Fib] to restrict the Anasazi pattern to marginata; (genotype [t j] gives the standard marginata pattern - PI 632718= GM#73).

PI 638665. Phaseolus vulgaris L.
Genetic. Genetic Marker 99; W6 24293. Pedigree - BC3 to 5-593 from 95-144. { [t*cf] [z] [j*ers] }; [j*ers] formerly [l*ers]; two-point seed coat pattern without hilum ring color, but has widely scattered fine dots on the remainder of seed coat; gene [t*cf] express colored flowers & potentiates the expression of partly colored seed patterns, but is less restrictive on extension of colored zones than standard [t] gene.

PI 638666. Phaseolus vulgaris L.
Genetic. Genetic Marker 100; W6 24294. Pedigree - BC3 to 5-593 from 01-374. { [Sal] [Am] [V*wf] }; scarlet red flowers (Royal Horticultural Society color fans: #1-43C) and black seed.

PI 638667. Phaseolus vulgaris L.
Genetic. Genetic Marker 101; W6 24648. Pedigree - BC3 to 5-593 from 03-465. { [Sal] [v] }; salmon red flowers (Royal Horticultural Society color fans: #1-52D) and mineral-brown seed with a red haze.

PI 638668. Phaseolus vulgaris L.
Genetic. Genetic Marker 102; W6 24649. Pedigree - BC3 to 5-593 from 03-455. { [Sal] [V] }; China red flowers (Royal Horticultural Society color fans: #2-64C to 2-N66C) and black seed.

PI 638669. Phaseolus vulgaris L.
Genetic. Genetic Marker 103; W6 24650. Pedigree - BC2 to 5-593 from 03-447. { [T] [Prp*i -2] [V] }; "intense" anthocyanin syndrome (expression) in flower buds, flowers, pedicels, pods, petioles, leaf lamina & stems; the purple color is especially obvious on flower buds & pods; gene [Prp*i -2] is dependent on [T], [P] & [V] for expression.

PI 638670. Phaseolus vulgaris L.
Genetic. Genetic Marker 104; W6 24651. Pedigree - BC3 to 5-593 from 03-450. { [T] [Prp*i -2] [v] }; Flowers with bright red banner back, very pale banner interior & white wings; mineral-brown seed. Effect of { [Prp*i -2] with [T][V] } is supressed by { [Prp*i -2] with [T][v] } except in the banner petal.

PI 638671. Phaseolus vulgaris L.
Genetic. Genetic Marker 105; W6 24652. Pedigree - BC2 to 5-593 from 03-555. { [T] [c*u] [Prp*i -2] [V] }; Two tone seed: purple margo & cartridge-buff - the [c*u] remainder. [Prp*i -2] expresses the "intense' anthrocyanin syndrome - see GS#103.

PI 638672. Phaseolus vulgaris L.
Genetic. Genetic Marker 106; W6 24653. Pedigree - BC2 to 5-593 from 03-555. { [T] [c*u] [rk*d] [Prp*i -2] [V] }; Two-tone seed: black ventral side & dark red kidney (garnet-brown) dorsal side.

PI 638673. Phaseolus vulgaris L.
Genetic. Genetic Marker 107; W6 24654. Pedigree - BC2 to 5-593 from 03-587. { [t] [p*mic] [Prp*i -2] [V] }; Flowers with dark blue (methyl violet 39/2) banner & pale blue wings (with dark blue veins), "intense" anthocyanin syndrome of {[Prp*i -2] with {T][V] } is surpressed by { [Prp*i -2] with [t][V] }, except in flower buds & corolla where partial expression is controlled by [Fib].

PI 638674. Phaseolus vulgaris L.
Genetic. Genetic Marker 108; W6 24655. Pedigree - BC3 to 5-593 from 03-553. { [c*u] [b] [v] [rk*d] }; Dark red kidney (garnet-brown) seed coat; with [v][rk*d] - red veins on white wing petals.

PI 638675. Phaseolus vulgaris L.
Genetic. Genetic Marker 109; W6 24656. Pedigree - BC2 to 5-593 from 01-220. { [g] [b] [v*lae] } or { [v] [gy] }; Seed greenish-yellow (under cool and low stress growing environments) and a purple corona; typically variable in the extent of seedcoat expressing a strong greenish-yellow, over the underlying chamois of [g] [b] [v*lae]. May be heterozygous at [V] for [v*lae / v] in some seed causing segregation for 'purple corona' / 'absence of purple corona', but will not affect the greenish-yellow over the remaining seedcoat.

PI 638676. Phaseolus vulgaris L.
Genetic. Genetic Marker 110; W6 24657. Pedigree - BC3 to 5-593 from 02-41. { [t] [Cl] [z] [b] [v] }; Virgarcus pattern of partly colored seed coat in yellow-brown without the circumlineatus trait expressed by [cl] as in PI 608674 = 5-593.

PI 638677. Phaseolus vulgaris L.
Genetic. Genetic Marker 111; W6 24658. Pedigree - BC3 to 5-593 from 03-439. { [t] [Cl] [c*u] [v] }; Virgarcus pattern of partly colored seed coat in cartridge-buff without the circumlineatus trait expressed by [cl] as in PI 608674 = 5-593.

PI 638678. Phaseolus vulgaris L.
Genetic. Genetic Marker 112; W6 24659. Pedigree - BC3 to 5-593 from 03-398. { [t] z*sel] [bip*ana] }; Virgarcus pattern of partly colored seed coat, normally expressed by [t] [z].

The following were developed by Seminis Vegetable Seeds, Inc., United States. Received 03/29/2005.

PI 638679. Solanum lycopersicum L.
Cultivar. Pureline. PSQ242088. PVP 200500043.

PI 638680 PVPO. Phaseolus vulgaris L.
Cultivar. Pureline. "CHIANTI"; XP 08530759. PVP 200500106.

PI 638681 PVPO. Lactuca sativa L.
Cultivar. Pureline. "Passport". PVP 200500143.

The following were developed by Pure Seed Testing, Inc., United States. Received 03/29/2005.

PI 638682 PVPO. Lolium perenne L.
Cultivar. Pureline. "Showtime"; PST-2LA. PVP 200500118.

PI 638683 PVPO. Festuca arundinacea Schreb.
Cultivar. Pureline. "Innovator"; PST-5KI. PVP 200500119.

PI 638684 PVPO. Festuca rubra L. **subsp. rubra**
Cultivar. Pureline. "Florentine GT". PVP 200500120.

The following were developed by D&PL Technology Holding Company, LLC, Netherlands. Received 03/29/2005.

PI 638685 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. 1339013. PVP 200500125.

PI 638686 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. 4136015. PVP 200500126.

PI 638687 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. 3133014. PVP 200500127.

PI 638688 PVPO. Glycine max (L.) Merr.
Cultivar. Pureline. 6084016. PVP 200500128.

PI 638689 PVPO. Gossypium hirsutum L.
Cultivar. Pureline. "DP 454 BG/RR". PVP 200500168.

PI 638690 PVPO. Gossypium hirsutum L.
Cultivar. Pureline. "DP 6222 RR Acala". PVP 200500179.

PI 638691 PVPO. Gossypium hirsutum L.
Cultivar. Pureline. "DP 6226 BG/RR Acala". PVP 200500180.

The following were developed by Glenn Page, Green Genes, Inc., 401 Second Street E., Wananmingo, Minnesota 55983, United States. Received 03/29/2005.

PI 638692 PVPO. Guizotia abyssinica (L. f.) Cass.
Cultivar. Pureline. "Earlybird 50". PVP 200500140.

The following were developed by William A. Meyer, Rutgers University, Plant Biology & Pathology Department, Foran Hall, 59 Dudley Road, New Brunswick, New Jersey 08903-0231, United States. Received 03/29/2005.

PI 638693 PVPO. Festuca longifolia Thuill.
Cultivar. Pureline. HOE. PVP 200500141.

PI 638694 PVPO. Lolium perenne L.
Cultivar. Pureline. 1G2. PVP 200500142.

PI 638695 PVPO. Festuca arundinacea Schreb.
Cultivar. Pureline. "Falcon IV". PVP 200500171.

PI 638696 PVPO. Festuca arundinacea Schreb.
Cultivar. Pureline. "Six Point". PVP 200500172.

The following were developed by WestBred LLC, 8111 Timberline Dr., Bozeman, Montana 59718, United States. Received 03/29/2005.

PI 638697 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "Nick". PVP 200500144. Pedigree - BZ692-11//Wakanz/Vanna.

PI 638698 PVPO. Triticum turgidum subsp. durum (Desf.) Husn.
Cultivar. Pureline. "Primo D'oro". PVP 200500167. Pedigree - Desert Lax-Headed Selection #1(selection from AZ-MSFRS-86 population)/Rugby.

The following were developed by Monsanto Technology LLC, United States. Received 03/29/2005.

PI 638699 PVPO. Zea mays L.
Cultivar. Pureline. I071535. PVP 200500145.

PI 638700 PVPO. Zea mays L.
Cultivar. Pureline. I113752. PVP 200500146.

PI 638701 PVPO. Zea mays L.
Cultivar. Pureline. I116412. PVP 200500147.

PI 638702 PVPO. Zea mays L.
Cultivar. Pureline. I390033. PVP 200500148.

PI 638703. Zea mays L.
Cultivar. Pureline. I900420. PVP 200500149.

PI 638704 PVPO. Zea mays L.
Cultivar. Pureline. I000091. PVP 200500155.

PI 638705 PVPO. Zea mays L.
Cultivar. Pureline. I002573. PVP 200500156.

PI 638706 PVPO. Zea mays L.
Cultivar. Pureline. I006234. PVP 200500157.

PI 638707 PVPO. Zea mays L.
Cultivar. Pureline. I029010. PVP 200500158.

PI 638708 PVPO. Zea mays L.
Cultivar. Pureline. I060062. PVP 200500159.

PI 638709 PVPO. Zea mays L.
Cultivar. Pureline. I082216. PVP 200500160.

PI 638710 PVPO. Zea mays L.
Cultivar. Pureline. I097062. PVP 200500161.

PI 638711 PVPO. Zea mays L.
Cultivar. Pureline. I119135. PVP 200500162.

PI 638712 PVPO. Zea mays L.
Cultivar. Pureline. I119148. PVP 200500163.

PI 638713. Zea mays L.
Cultivar. Pureline. I130248. PVP 200500164.

PI 638714 PVPO. Zea mays L.
Cultivar. Pureline. I900429. PVP 200500165.

The following were developed by Pioneer Hi-Bred International, Inc., Windfall, Indiana, United States. Received 03/29/2005.

PI 638715 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "25R63"; XW03R. PVP 200500151. Pedigree - WBF0205B1/WBB076D1//2552.

PI 638716 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "25R51"; XW03U. PVP 200500152. Pedigree - WBI1097S1/25R18 sib//2571.

PI 638717 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "26R22"; XW03X. PVP 200500153. Pedigree - 25R57 sib/WBF0337A1//2552.

PI 638718 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "8404"; YW03W. PVP 200500154. Pedigree - WEE066C5/Hunter//2628.

The following were developed by Syngenta Seeds, Inc., United States. Received 03/29/2005.

PI 638719 PVPO. Phaseolus vulgaris L.
Cultivar. Pureline. "Diplomat". PVP 200500166.

The following were developed by North Dakota State University Research Foundation, North Dakota, United States. Received 03/29/2005.

PI 638720. Glycine max (L.) Merr.
Cultivar. Pureline. "Pembina". PVP 200500169.

PI 638721. Glycine max (L.) Merr.
Cultivar. Pureline. "ProSoy". PVP 200500170.

The following were developed by Michigan State University, Department of Crop Science, East Lansing, Michigan, United States. Received 03/29/2005.

PI 638722 PVPO. Phaseolus vulgaris L.
Cultivar. Pureline. "Merlot". PVP 200500181.

The following were developed by Pybas Vegetable Seed Company, P.O. Box 868, Santa Maria, California 93456, United States. Received 03/29/2005.

PI 638723. Lactuca sativa L.
Cultivar. Pureline. "Mariah". PVP 200500178.

The following were developed by Shamrock Seed Co., Inc., California, United States. Received 03/29/2005.

PI 638724 PVPO. Lactuca sativa L.
Cultivar. Pureline. "Blockbuster". PVP 200500183.

The following were developed by DLF International Seeds, Inc., United States. Received 03/29/2005.

PI 638725 PVPO. Lolium hybrid
Cultivar. Pureline. "Tetrelite II". PVP 200500182.

The following were developed by The Regents of the University of California, 1111 Franklin Street, Oakland, California 94607, United States. Received 03/29/2005.

PI 638726 PVPO. Triticum turgidum subsp. durum (Desf.) Husn.
Cultivar. Pureline. "Desert King"; UC1375. PVP 200500187. Pedigree - Lavandera_2/2*(Hutile/Yavaros).

The following were developed by Rutgers University, Hilltop Gardens, New Jersey, United States. Received 03/29/2005.

PI 638727 PVPO. Poa pratensis L.
Cultivar. Pureline. A99-2041. PVP 200500188.

PI 638728 PVPO. Poa pratensis L.
Cultivar. Pureline. H94-707. PVP 200500189.

The following were developed by Pan American Seed Company, 15861 Green Road, Elburn, Illinois, United States. Received 03/29/2005.

PI 638729. Hibiscus moscheutos L.
Cultivar. Pureline. "Balhibpsw". PVP 200500190.

PI 638730. Hibiscus moscheutos L.
Cultivar. Pureline. "Balhibwhi". PVP 200500191.

Unknown source. Received 02/10/1999.

PI 638731. Prunus hybrid
Cultivar. "PV hybrid #2"; Q 39661; GPRU 86. Pedigree - Pamjat Vavilova x 12-1a320.

Unknown source. Received 02/10/1999.

PI 638732. Prunus hybrid
Cultivar. Q 39657; GPRU 89; Lubskaya x P. maximowkzii.

The following were donated by Raymond G. Mock, USDA, ARS, Fruit Laboratory, Plant Germplasm Quarantine Office, Beltsville, Maryland 20705-2350, United States. Received 03/26/2001.

PI 638733. Prunus fruticosa Pall.
Cultivar. Q39505; GPRU 100; Luganskaya 4.

The following were donated by Amy F. Iezzoni, Michigan State University, Department of Horticulture, East Lansing, Michigan 48823, United States. Received 09/13/2002.

PI 638734. Prunus cerasus L.
GPRU 103; Almaz o.p..

The following were donated by Sergey Alexanian, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation. Received 09/10/1999.

PI 638735. Prunus pensylvanica L. f.
Cultivar. Q 40514; P. pensylvanica; GPRU 107.

PI 638736. Prunus fruticosa Pall.
Cultivar. "Sverdlovsk"; Q 40521; Q 43176; GPRU 108.

PI 638737. Prunus nipponica var. kurilensis (Miyabe) E. H. Wilson
Cultivar. Q 30509; Q 43177; P. kuriliensis; GPRU 109.

The following were developed by Jorge Dubcovsky, University of California, Department of Plant Sciences, One Shields Avenue, Davis, California 95616-8515, United States; Lee F. Jackson, University of California, Department of Plant Sciences, One Shields Avenue, Davis, California 95616-8780, United States; Xianming Chen, USDA-ARS, WSU - Wheat Genetics Unit, PO Box 646430, Pullman, Washington 99164-6430, United States; O. Chicaiza, University of California, Dept. of Plant Sciences, Davis, California 95616-8515, United States; I.A. Khan, University of California, Dept. of Plant Sciences, Davis, California 95616-8515, United States; X. Zhang, University of California, Dept. of Plant Sciences, Davis, California 95616-8515, United States; J.C. Brevis, University of California, Dept. of Plant Sciences, Davis, California 95616-8515, United States. Received 04/04/2005.

PI 638738. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. Yecora Rojo Lr47; NSGC 9506. GP-791. Pedigree - PI603918*7/Yecora Rojo. Yecora Rojo isogenic line for Lr47. BC6F4 homozygous line for leaf rust resistance gene Lr47 (from PI 603918). The T. speltoides 7S chromosome segment carrying Lr47 is located 2-10 cM from the centromere and is 20-30 cM long. The chromosome segment was selected during the 6 backcrosses using molecular markers. Yecora Rojo isogenic lines with and without Lr47 were compared in field trials at Kings, California in 2003 and at Kings and Davis, California in 2004. The isogenic lines with and without the gene showed similar agronomic characteristics including height and heading time. Depending on the environment some of the plants carrying the Lr47 chromosome segment showed purple stems. No significant differences in yield were observed between the isogenic lines grown at Kings. However, at Davis under strong stripe rust infection pressure, the lines carrying Lr47 showed a 10% increase in stripe rust infections which resulted in a significant decrease in yield. These results suggest that the 7S chromosome segment has probably replaced a gene located in the 7A chromosomes of Yecora Rojo that has a small positive effect on resistance to stripe rust races present in these locations. Analysis of the isogenic lines for grain protein content showed a significant increase (average 0.6%) associated with the presence of the Lr47 chromosome segment in the tested locations.

PI 638739. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. Kern Lr47; NSGC 9507. GP-792. Pedigree - PI603918*7/Kern. Kern isogenic line for Lr47. BC6F3 homozygous line for leaf rust resistance gene Lr47 (from PI 603918). The T. speltoides 7S chromosome segment carrying Lr47 is located 2-10 cM from the centromere

and is 20-30 cM long. The chromosome segment was selected during the 6 backcrosses using molecular markers. Kern isogenic lines with and without Lr47 were compared in field trials at Kings, California in 2003 and at Kings and Davis, California in 2004. The isogenic lines with and without the gene showed similar agronomic characteristics including height and heading time. Depending on the environment some of the plants carrying the Lr47 chromosome segment showed purple stems. No significant differences in yield were observed between the isogenic lines grown at Kings. However, at Davis under strong stripe rust infection pressure, the lines carrying Lr47 showed a 18% increase in stripe rust infections which resulted in a significant decrease in yield. These results suggest that the 7S chromosome segment has probably replaced a gene located in the 7A chromosomes of Kern that has a small positive effect on resistance to stripe rust races present in these locations. Analysis of the isogenic lines for grain protein content showed a significant increase (average 0.4%) associated with the presence of the Lr47 chromosome segment in the tested locations.

PI 638740. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. Yecora Rojo Yr36 Gpc-B1; NSGC 9508. GP-793. Pedigree - FA15-3 (T. dicoccoides from Israel)*7/Yecora Rojo. Yecora Rojo isogenic line for Yr36 and Gpc-B1. BC6F3 homozygous line for T. dicoccoides stripe rust resistance gene Yr36 and high-grain protein content gene Gpc-B1 into HRS recurrent parent Yecora Rojo. The high-grain protein content allele for the Gpc-B1 gene and the linked stripe rust resistance gene Yr36 were originally transferred from T. dicoccoides. These linked genes (less than 3 cM apart) were mapped in the short arm of chromosome 6BS and molecular markers were developed to facilitate their introgression. This isogenic line has been designated as the type T. aestivum germplasm line for the Yr36 gene. The two genes were transferred by 6 backcrosses followed by selection of homozygous BC6F2 plants using molecular markers. The isogenic lines of Yecora Rojo were compared in field trials in Madera and Davis, California in 2004 under severe stripe rust infections using a split plot design with 5 replications and large plots. Isogenic lines with and without the genes showed similar agronomic characteristics including height and heading time. The line with the Yr36-Gpc-B1 genes showed reduced stripe rust infections (average 36%), higher yields (average 970 kg/ha), and increased grain protein content (average 0.8%).

PI 638741. Triticum turgidum subsp. durum (Desf.) Husn.
Genetic. Pureline. UC1113 Yr36 Gpc-B1; NSGC 9509. GP-794. Pedigree - FA15-3 (T. dicoccoides from Israel)*7/UC1113 [Davis selection from CIMMYT bulked F2 seed from cross CD52600 [(KIFSxRSS-BD1419/MEXIS-CP)WAHAS]YAV79]. UC1113 isogenic line for Yr36 and Gpc-B1. BC6F3 homozygous line for T. dicoccoides stripe rust resistance gene Yr36 and high-grain protein content gene Gpc-B1 into HRS recurrent parent UC1113. The high-grain proteint content allele for the Gpc-B1 gene and the linked stripe rust resistance gene Yr36 were originally transferred from T. dicoccoides. These two linked genes (less than 3 cM apart) were mapped in the short arm of chromosome 6BS. This isogenic line has been designated as the type germplasm for the Yr36 gene in T. durum. The two genes were transferred by 6 backcrosses followed by selection of homozygous BC6F2 plants using molecular markers. The isogenic lines of UC1113 were compared in field trials in Madera and Davis, California in 2004 under severe stripe rust infection pressure using a split plot design with 5 replications and large plots. Isogenic lines with and without the gene showed similar agronomic characteristics including height

and heading time. The line with Yr36-Gpc-B1 genes showed reduced stripe rust infections (average 34% reduction in severity), slightly higher yields (average 240 kg/ha, but not significant), and increased grain protein content (average 1.1% increase).

PI 638742. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. Anza Lr37 Yr17 Sr38; NSGC 9510. GP-795. Pedigree - VPM1*7/Anza. Anza isogenic line for a 2NS/2AS translocation carrying rust resistance genes Lr37/Yr17/Sr38. BC6F4 homozygous line for the rust resistance genes transferred into HRS recurrent parent Anza. The Lr37 (leaf rust resistance), Yr17 (stripe rust resistance), and Sr38 (stem rust resistance) were initially introgressed in the winter bread wheat VPM1 from T. ventricosum. Rust races with virulence to Yr17 and Lr37 have been identified in some countries, but this gene cluster still provides resistance to a wide range of races and is useful in combination with other resistance genes. The 2NS/2AS translocation replaced approximately half of the short arm of chromosome 2A. Molecular markers for this segment were used to introgress these resistance genes into Anza using 6 backcrosses. Isogenic lines with and without the gene were tested in field trials at Davis and Kings, California in 2004 under severe stripe rust infection pressure. The isogenic lines were morphologically similar and showed no significant differences in flower time and height. The presence of Yr17 significantly reduced the severity of stripe rust infection (61% reduction in severity). The recurrent parent Anza has the slow rusting complex Lr34/Yr18 suggesting that the addition of Yr17 increases the resistance to stripe rust provided by Yr18. The improved resistance of the Yr17 isogenic lines resulted in significant increases in yield in both locations (average 663 kg/ha). The molecular and field data confirmed that the 2NS chromosome segment including the Lr37/Yr17/Sr38 resistance genes was successfully transferred to Anza.

The following were collected by G. J. Galletta, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States. Developed by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Donated by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 02/14/1983.

PI 638743. Vaccinium caesariense Mack.
Breeding. CVAC 198; NC 78-6. Collected 05/29/1978 in North Carolina, United States. Latitude 35° 30' N. Longitude 79° 20' W. Carthage, extensive area under power line right-of-way. Pedigree - Selected from the wild in N. Carolina. IDX. Plants were cut back 2 years prior to collection.

The following were collected by Raul Castillo, Instituto Nacional de Investigaciones Agropecuarias, Departamento de Recursos, Fitogeneticos, Estacion Experimental, Quito, Pichincha, Ecuador; David Spooner, USDA, ARS, University of Wisconsin, Department of Horticulture, Madison, Wisconsin 53706-1590, United States. Donated by George A. White, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616, United States. Received 08/05/1991.

PI 638744. Vaccinium sp.
Wild. CVAC 882. Collected 1991 in Ecuador. Pedigree - Collected from the wild in Ecuador. Passport data not received.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 07/25/1991.

PI 638745. Vaccinium corymbosum L.
Wild. CVAC 884. Collected 07/23/1991 in Pennsylvania, United States. Bear Meadows, top of the hill. Pedigree - Collected from the wild in Pennsylvania. Seed collected also.

PI 638746. Vaccinium pallidum Aiton
Wild. CVAC 885. Collected 07/23/1991 in Pennsylvania, United States. Bear Meadows, top of the hill. Pedigree - Collected from the wild in Pennsylvania. Blue leaved form.

PI 638747. Vaccinium pallidum Aiton
Wild. CVAC 886. Collected 07/23/1991 in Pennsylvania, United States. Bear Meadows, top of the hill. Pedigree - Collected from the wild in Pennsylvania. Regular form (diploid).

PI 638748. Vaccinium corymbosum L.
Wild. Deerberry; CVAC 890. Collected 07/23/1991 in Pennsylvania, United States. Bear Meadows, top of the hill and adjacent to a bog. Pedigree - Collected from the wild in Pennsylvania.

The following were collected by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Donated by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received 08/28/1991.

PI 638749. Vaccinium hirtum Thunb.
Wild. CVAC 891. Collected 08/20/1991 in Honshu, Japan. Latitude 36° 30' N. Longitude 136° 30' E. Elevation 1930 m. Mt. Tateyama, Tateyama-machi, Nakaniikawa-gun, Toyama Pref. Pedigree - Collected from the wild in Japan. Open population sample, only 3 berries collected. Fruit red. From Midagahara Plateau.

PI 638750. Vaccinium ovalifolium Sm.
Wild. CVAC 892. Collected 08/20/1991 in Honshu, Japan. Latitude 36° 30' N. Longitude 136° 30' E. Elevation 1930 m. Mt. Tateyama, Tateyama-machi, Nakaniikawa-gun, Toyama Pref. Pedigree - Collected from the wild in Japan. From Midigahara Plateau.

PI 638751. Vaccinium sp.
Wild. CVAC 893. Collected 08/20/1991 in Honshu, Japan. Latitude 36° 30' N. Longitude 136° 30' E. Elevation 1930 m. Mt. Tateyama, Tateyama-machi, Nakaniikawa-gun, Toyama Pref. Pedigree - Collected from

the wild in Japan. Mixture of V. uliginosum and V. ovalifolium. From Midagahara Plateau.

PI 638752. Vaccinium uliginosum L.
Wild. CVAC 894. Collected 08/20/1991 in Honshu, Japan. Latitude 36° 30' N. Longitude 136° 30' E. Elevation 1930 m. Mt. Tateyama, Tateyama-machi, Nakaniikawa-gun, Toyama Pref. Pedigree - Collected from the wild in Japan. From Midigahara Plateau.

The following were collected by D.C. Ogle, USDA, ARS, Forage and Range Research, Utah State University, Logan, Utah 84322-6300, United States. Donated by Calvin R. Sperling, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 402, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 10/30/1991.

PI 638753. Vaccinium macrocarpon Aiton
Wild. American Cranberry, Large Cranberry; CVAC 901. Collected 10/19/1991 in Tennessee, United States. Latitude 36° 31' N. Longitude 81° 58' W. Elevation 1120 m. Side of Holston mountains above Shady Valley, Johnson county, Tennessee. Habitat saturated stream bank at lower edge of secondary seep. Edged by dry deciduous woods. Carex sp., Scirpus cyperinus, Pinus strobus, Lyonia ligustrina, Rosa sp., Dulichium arundinaceum, et al. Pedigree - Collected from the wild in Tennessee. Habitat saturated stream bank at lower edge of secondary seep edged by dry deciduous woods.

The following were collected by Jeannie Allen, USDA, ARS, 7000 Storch Lane, Seabrook, Maryland 20706, United States. Received 11/05/1991.

PI 638754. Vaccinium macrocarpon Aiton
Wild. Allen 9; American Cranberry, Large Cranberry; CVAC 911. Collected 10/29/1991 in Maryland, United States. Elevation 830 m. Pedigree - Collected from the wild in Maryland. V. macrocarpon intermixed with V. oxycoccos. Collection site to be renamed by the Maryland National Heritage Program Staff.

PI 638755. Vaccinium oxycoccos L.
Wild. Allen 10; Cranberry, Small-fruited Cranberry; CVAC 912. Collected 10/29/1991 in Maryland, United States. Elevation 830 m. Pedigree - Collected from the wild in Maryland. V. macrocarpon intermixed with V. oxycoccos.

The following were collected by Jerry Tecklin, 21020 Shields Camp Rd., Nevada City, California 95959, United States. Received 12/18/1991.

PI 638756. Vaccinium macrocarpon Aiton
Wild. American Cranberry, Large Cranberry; CVAC 930. Collected 12/1991 in California, United States. Badger Pit, old mining area. Pedigree - Collected from the wild in California. From small seep-fed depression in center of an excavated pit.

The following were donated by Robert Kleiman, USDA, ARS, National Center for Agric., Utilization Research, Peoria, Illinois 61604, United States. Received 01/31/1992.

PI 638757. Vaccinium arctostaphylos L.
Uncertain. CVAC 937. Collected in Turkey. Pedigree - collected from the wild in Turkey. Improvement status unspecified.

The following were donated by Tim Hohn, Washington Park Center for, Urban Horticulture, University of Washington, Seattle, Washington 98195, United States. Received 06/18/1992.

PI 638758. Vaccinium ovalifolium Sm.
Wild. CVAC 1053. Collected in Washington, United States. Elevation 1000 m. Snohomish Nat'l Forest, Glacier Peak Wilderness. Pedigree - Collected from the wild in Washington.

PI 638759. Vaccinium virgatum Aiton
Cultivated. CVAC 1054. Collected in Uncertain. Pedigree - Uncertain, from botanical collection.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Barbara Fick, Oregon State University, Extension Service, Marion County, 3180 Center NE, Room 1361, Salem, Oregon 97301, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 03/20/1993.

PI 638760. Vaccinium arboreum Marshall
Wild. Farkleberry, Sparkleberry; CVAC 1095. Collected 10/1992 in Missouri, United States. Latitude 37° N. Longitude 90° W. Elevation 0 m. T36N, R2E, Sec 9, E 1/2 (along east side of road) Site just north of Belgrade, Missouri, Washington County. As understory plants with Vaccinium stamineum and V. vacillans. Cornus florida present as understory tree. Highly orgnaic duff layer. Plants straggly and not in their prime due to poor light penetration. Pedigree - collected from the wild in Missouri. Fruits ripen at this site from late August until a hard freeze. Green fruits have been seen late October. Plants show only shrub habit. Fruiting plants typically approximately 1.2 m tall. Foliage glossy and dark green. Fruit glossy and black, about 0.6 cm in diameter. No visible winter injury or insect damage. Minimal disease problems: Ophiodothella spp., which doesn't appear to affect the plant; some fruit appeared to have mummyberry (Monilinia spp.). For best germination of dry seed, Ballington (NC State) and Lyrene (U. of Florida) suggest soaking the seeds for 24 hrs. in 500ppm GA4+7 prior to germination.

PI 638761. Vaccinium arboreum Marshall
Wild. Farkleberry, Sparkleberry; CVAC 1096. Collected 10/1992 in Missouri, United States. Latitude 36° N. Longitude 91° W. Elevation 0 m. T29N, R3W, SW 1/4, NW 1/4. Near Two Rivers State Park at junction Current River and Jacks Fork, Shannon County, MO. Site is a series of falls and pools surrounded by cliffs. Population was growing from the top of the exposed rock, down the cliffs in crevices, and to the stream bed; ca 25 m. V. arboreum and V. stamineum dominant are woody shrubs here. Pedigree - collected from the wild in Missouri. Fruit ripens on this plant from late August until a hard freeze. Green fruits have been seen late October. Fruiting plants from 1.5-2.4 m tall.

Foliage glossy and dark green. Fruit ranging from dark blue to black, 0.4-0.8 cm in diameter. Location in crevices suggests drought tolerance. No visible winter injury or insect damage. Minimal disease problems: Ophiodothella spp., which doesn't appear to affect the plant; some fruit appeared to have mummyberry (Monilinia spp.). For best germination of d ry seed, Ballington (NC State) and Lyrene (U. of Florida) suggest soaking the seeds for 24 hrs. in 500ppm GA4+7 prior to germination.

The following were donated by Rod Serres, University of Wisconsin-Madison, Department of Horticulture, 1575 Linden Drive, Madison, Wisconsin 53706-1590, United States. Received 04/27/1993.

PI 638762. Vaccinium vitis-idaea L.
Breeding. CVAC 1102; Koralle. Developed in Germany. Pedigree - selection of lingonberry from Germany. Originated in Reeuwijk, The Netherlands by H. van der Smit. Released in 1969. Plant strongly branched, height up to 30 cm., round fruit in clusters of 5-12 berries varying from light red to dark red. 'Koralle' was originally a collection of 35 plants selected from a population of seedlings as a mixture. Thus the identity may be confused, depending on the clone propaged from the original stock. -- E.J. Stang. 1994. Lingonberry Cultivars - Building Blocks for an Industry. Fruit Varieties Journal 48(1):3-6.

The following were developed by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 11/08/1993.

PI 638763. Vaccinium hybrid
Breeding. CVAC 1156; Blue-Cran Hybrid NC 3399. Pedigree - V. crassifolium (NC 79) x V. macrocarpon (mixed pollen). The crassifolium was crossed with named cranberry clones.

The following were developed by D.G. Routley. Donated by Mark Ehlenfeldt, USDA, ARS, Rutgers Blueberry and Cranberry, Research Center, Chatsworth, New Jersey 08019, United States. Received 01/24/1997.

PI 638764. Vaccinium corymbosum L.
Cultivar. "Meader"; CVAC 1303. Pedigree - Earliblue x Bluecrop. Fruit large, firm, maintains size in subsequent pickings, good flavor, very productive.

The following were developed by Mark Ehlenfeldt, USDA, ARS, Rutgers Blueberry and Cranberry, Research Center, Chatsworth, New Jersey 08019, United States. Donated by Bernadine C. Strik, Oregon State University, Department of Horticulture, 4017 ALS, Corvallis, Oregon 97331, United States; Bernadine C. Strik, Oregon State University, Department of Horticulture, 4017 ALS, Corvallis, Oregon 97331, United States. Received 03/07/1997.

PI 638765. Vaccinium corymbosum L.
Cultivar. "Chanticleer"; G-481; CVAC 1304. Pedigree - G-180 x MEUS 6620. Tested as G-481, CHANTICLEER is a sibling of 'Sunrise'. Crossed in 1974 by A.D. Draper at Beltsville, Maryland. Selected in 1978 at the Atlantic

Blueberry Company, Hammonton, NJ, and subsequently evaluated by A.D. Draper, G.J. Galletta, G. Jelenkovic, N. Vorsa, and M.K. Ehlenfeldt. CHANTICLEER (the rooster) was so named because of its characteristic of very early ripening. CHANTICLEER ripens its fruit 2-5 days earlier than 'Weymouth', the earliest leading cultivar, and is superior to 'Weymouth' in fruit size and color. Its fruit are medium sized, medium to light blue, with good scars, and good firmness. CHANTICLEER fruit is sweet, sub-acid, and mild -flavored. Production is equivalent to 'Weymouth'. Table 1 compares fruit characteristics of CHANTICLEER to 'Weymouth', 'Duke', and 'Bluecrop'. CHANTICLEER is an upright, moderate height bush, that flowers slightly later than 'Weymouth' offering improved avoidance from damage by late spring frosts. Observations have suggested it is resistant to mummy berry blight (Monilinia vaccinii-corymbosi.) Screening in North Carolina has shown it to be relatively resistant to stem blight (Botryosphaefia dothidea), but blighting has been observed in New Jersey on some younger plantings. CHANTICLEER has been a consistently good performer in New Jersey, but has been more variable in other regions, producing low to moderate yields in Michigan, Arkansas, Oregon, and North Carolina. CHANTICLEER is recommended as an early season cultivar primarily for commercial growers in northeastern temperate regions, including New Jersey and adjoining states. 'Chanticleer' is an early - maturing tetrapoid highbush blueberry that was developed by the cooperative breeding program of ARS and the New jersey Agricultural Experiment Station.

The following were collected by Richard A. Moyer, King College, 1350 King College Rd., Bristol, Tennessee 37620, United States. Received 01/04/2000.

PI 638766. Vaccinium macrocarpon Aiton
Wild. CVAC 1429. Collected 10/22/1999 in Tennessee, United States. Elevation 0 m. Ruritan Cranberry Nursery, Shady Valley, Johnson county. Pedigree - Collected from the wild in Tennessee. Private residence, Lester and Pearl Osborne, Route 1, Box 214, Shady valley TN, On north facing side of cross mountain about 200 yards north and downslope from Osborne's barn at top of ridge, nearly level half acre seepage area at junction of 2 headwater creeks on north facing slope.

The following were developed by Ed Gryglesky, Wisconsin, United States. Donated by Eric Zeldin, Department of Horticulture, University of Wisconsin-Madison, 1575 Linden Drive, Madison, Wisconsin 53706-1590, United States. Received 04/25/2001.

PI 638767. Vaccinium hybrid
Cultivar. GH 1; Grygleski 1; Grygleski Hybrid 1; CVAC 1446. Pedigree - 'Earl Rezin McFarlin' open pollinated. Selections by Ed Grygleski at his marsh. Seedlings grown out in 1980 and selections made in 1982.

PI 638768. Vaccinium hybrid
Cultivar. Grygleski Hybrid 2; Grygleski 2; GH 2; CVAC 1447. Pedigree - Earl Rezin McFarlin open pollinated. Selections by Ed Grygleski at his marsh. Seedlings grown out in 1980 and selections made in 1982.

Unknown source. Received 08/31/2001.

PI 638769. Vaccinium vitis-idaea L.
Wild. HVSC-013; CVAC 1452. Collected in Primorye, Russian Federation. Latitude 44° 19' 56" N. Longitude 135° 14' 40" E. Elevation 349 m. Open woods giving 80% exposure to a well-drained gravel-loam duff. Larix betula, Abies, Rhododendron, Populus dairdiana, and Convolvulus-Harebells grasses all present. Pedigree - Collected from the wild in Primorye, Russain Federation.

Unknown source. Received 08/31/2001.

PI 638770. Vaccinium oxycoccos L.
Wild. HVSC-045; CVAC 1460. Collected in Khabarovsk, Russian Federation. Latitude 46° 32' 4" N. Longitude 134° 25' 25" E. Elevation 70 m. Located in a poorly drained bog-humus swamp with a few streams flowing though with no over story. Cattails, grass sedges, and willows present. Pedigree - Collected from the wild in Khabarovsk, Russain Federation.

Unknown source. Received 08/31/2001.

PI 638771. Vaccinium vitis-idaea L.
Wild. HVSC-090; CVAC 1479. Collected in Khabarovsk, Russian Federation. Latitude 49° 2' 47" N. Longitude 139° 27' 32" E. Elevation 766 m. Go westward from the coastal town of Vanino, Khabarovsk for about 65 km. On the ridge between the Huia river and Kholodnbu creek. Wooded area beside road. Poor drainage with Larix, White Birch, Walnut and Fireweed. Pedigree - Collected from the wild in Khabarovsk, Russain Federation.

The following were collected by Thomas Davis, University of New Hampshire, College of Life Science and Agriculture, Plant Biology/Genetics, Durham, New Hampshire 03824-3597, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Hiroyuki Imanishi, Akita Prefectural College of Agriculture, Experimental Farm, 6 Ogata, Ogata, Akita 010-0451, Japan; Hiroyuki Iketani, National Res. Inst. of Vegetables, Ornamentals and Tea, 360 Kusawa, Ano Mie, Japan. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/03/2004.

PI 638772. Vaccinium hirtum Thunb.
Wild. V. hirtum J54; HD-2004-54; CVAC 1637. Collected 07/17/2004 in Hokkaido, Japan. Latitude 44° 13' 23" N. Longitude 143° 23' 3" E. Elevation 95 m. Shimararagy River about 2 km N of Monbetsu. back from edge of road about. Pedigree - Collected from the wild in Hokkaido, Japan. This accession was collected under the auspices of a bilateral agreement between the National Institute of Agrobiological Sciences, Ministry of Agriculture Fisheries and Foods, Japan, and the U. S. Department of Agriculture, Agricultural Reseach Service, USA, prepared in May 2004.

The following were collected by Paul Meyer, The University of Pennsylvania, Morris Arboretum, 9414 Meadowlark Avenue, Philadelphia, Pennsylvania 19118,

United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Marine Mosulishvili, Plant Systematics, Institute of Botany, Georgian Academy of Sciences, Kojori road 1, Tbilisi, Georgia; Giorgi Arabuli, State Museum of Georgia, Tbilisi, Georgia. Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/26/2004.

PI 638773. Vaccinium vitis-idaea L.
Wild. GE-2004-059; CVAC 1654. Collected 09/29/2004 in Georgia. Pedigree - Collected from the wild in the Republic of Georgia.

PI 638774. Vaccinium myrtillus L.
Wild. GE-2004-060; CVAC 1655. Collected 09/29/2004 in Georgia. Pedigree - Collected from the wild in the Republic of Georgia.

PI 638775. Vaccinium sp.
Wild. GE-2004-096; CVAC 1656. Collected 10/03/2004 in Georgia. Pedigree - V. arctostaphylos possibly mixed with V. myrtillus. Collected from the wild in the country of Georgia.

PI 638776. Vaccinium arctostaphylos L.
Wild. GE-2004-098; CVAC 1657. Collected 10/04/2004 in Georgia. Pedigree - Collected from the wild in the Republic of Georgia.

The following were collected by David Ianson, USDA, ARS, National Arctic Plant Genetic, Resources Unit, Palmer, Alaska 99645, United States. Received 10/29/2004.

PI 638777. Vaccinium uliginosum L.
Wild. 1VAC; CVAC 1658; AG 32. Collected 10/16/1999 in Alaska, United States. Pedigree - Collected from the wild in Alaska.

The following were collected by Andrew S. Nolen, Alaska Plant Materials Center, National Arctic Plant Genetic, Resources Unit, Palmer, Alaska 99645-9706, United States. Donated by David Ianson, USDA, ARS, National Arctic Plant Genetic, Resources Unit, Palmer, Alaska 99645, United States. Received 10/29/2004.

PI 638778. Vaccinium oxycoccos L.
Wild. 1OXYC; CVAC 1659; AG 457. Collected 10/11/2000 in Alaska, United States. Pedigree - Collected from the wild in Alaska.

The following were collected by David Ianson, USDA, ARS, National Arctic Plant Genetic, Resources Unit, Palmer, Alaska 99645, United States. Received 10/29/2004.

PI 638779. Vaccinium vitis-idaea L.
Wild. 1ARC; CVAC 1660; AG 445. Collected 08/19/1999 in Alaska, United States. Pedigree - Collected from the wild in Alaska.

PI 638780. Vaccinium vitis-idaea L.
Wild. CVAC 1661; Point McKenzie. Collected 10/01/2002 in Alaska, United States. Pedigree - Collected from the wild in Alaska.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 12/13/2004.

PI 638781. Vaccinium cylindraceum Sm.
Wild. V. cylindraceum Azores; KH-2004-02; CVAC 1662. Collected 12/09/2004 in Azores, Portugal. Pedigree - Collected from the wild in the Azores, Portugal.

The following were collected by Nellie M. Stark, 36053 Blakesley Creek Rd, Philomath, Oregon 97370, United States. Received 02/14/2005.

PI 638782. Vaccinium membranaceum Douglas ex Torr.
Wild. CVAC 1663; V. membranaceum Blue Huckleberry. Collected 09/1990 in Montana, United States.

Unknown source. Received 12/25/1998.

PI 638783. Vaccinium ovatum Pursh
Wild. V. ovatum #1; CVAC 1664. Collected 08/1998 in California, United States. Latitude 40° 21' 10" N. Longitude 123° 58' 17" W. Elevation 60 m. Humboldt State Park, along Bull Creek, about 3 miles west of main highway on Mattole Road.

Unknown source. Received 12/25/1998.

PI 638784. Vaccinium parvifolium Sm.
Wild. V. parvifolium #1; CVAC 1665. Collected 08/1998 in California, United States. Latitude 40° 21' 10" N. Longitude 123° 58' 17" W. Elevation 60 m. Humboldt State Park, along Bull Creek, about 3 miles west of main highway on Mattole Road.

The following were collected by Thomas J. Payne, Billberries, 865 Woodside Way, San Mateo, California 94401, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 02/28/2005.

PI 638785. Vaccinium myrtillus L.
Wild. CVAC 1666; V. myrtillus Kosovo. Collected 2003 in Serbia.

The following were developed by Wayne W. Hanna, USDA, ARS, Coastal Plains Experiment Station, P.O. Box 748, Tifton, Georgia 31794, United States; Patricia Timper, Nematodes, Weeds & Crops, Research Unit, USDA-ARS, P.O. Box 748, Tifton, Georgia 31793, United States; Jeffrey P. Wilson, USDA, ARS, Crop Genetics & Breeding Research Unit, Georgia Coastal Plain Experiment Station, Tifton, Georgia 31793, United States. Received 03/08/2005.

PI 638786. Pennisetum glaucum (L.) R. Br.
Breeding. Inbred. Tift 99D2 B1. PL-44. Pedigree - Derived from a dwarf rust resistant plant selected from a Rust Resistant Bulk Seed Population

that was crossed with inbred 1164B. Four backcrosses were made to 1164B with selection for rust resistance. A rust resistant plant with desirable agronomic characteristics was selected in BC4 and selfed for two generations to develop a uniform inbred. Seeds are brownish-grey. Plants are at 50% anthesis in 54 to 56 d after planting and are 0.6 to 0.8 in height at maturity. Tift 99D2A1 pollinated with Tift 454 produces pearl millet grain hybrid, TifGrain 102.

PI 638787. Pennisetum glaucum (L.) R. Br.
Breeding. Inbred. Tift 99D2 A1. PL-45. Pedigree - Tift 99D2B1 was backcrossed to 90D2A1E1 (cms line used to produce pearl millet grain hybrid HGM-100) for seven generations to produce cms Tift 99D2A1. Seeds are brownish-grey. Plants are at 50% anthesis in 54 to 56 d after planting and are 0.6 to 0.8 in height at maturity. Tift 99D2A1 pollinated with Tift 454 produces pearl millet grain hybrid, TifGrain 102.

The following were donated by Myra Manoah, Ministry of Agriculture, The Volcani Center, The Israeli Gene Bank for Agricultural Crops, Bet Dagan, Central 50250, Israel. Received 08/09/2000.

PI 638788. Ricinus communis L.
Uncertain. RICO-8-1; 63538; Grif 14526. Collected 04/22/1999 in Israel. W. Bet Shemesh.

The following were developed by Wayne W. Hanna, USDA, ARS, Coastal Plains Experiment Station, P.O. Box 748, Tifton, Georgia 31794, United States; Patricia Timper, Nematodes, Weeds & Crops, Research Unit, USDA-ARS, P.O. Box 748, Tifton, Georgia 31793, United States; Jeffrey P. Wilson, USDA, ARS, Crop Genetics & Breeding Research Unit, Georgia Coastal Plain Experiment Station, Tifton, Georgia 31793, United States. Received 03/08/2005.

PI 638789. Pennisetum glaucum (L.) R. Br.
Breeding. Inbred. Tift 454. PL-46. Pedigree - From a pollen shedding plant (2n=2x=14) selected from among plants in a Tift 23 D2A1 [cytoplasmic-nuclear male sterile (cms) pearl millet) x MN23 [2n=6x=42 pearl millet x napiergrass (P. purpureum] interspecific hybrid cross. Seeds are brownish-grey. Plants are 0.8 to 1.0 m in height at maturity and are at 50% anthesis in 54 to 57 d after planting. Has one or more A-genome chromosomes from P. purpureum which are homologous to the A-genome chromosomes of pearl millet (2n=2x=14). Shows high resistance to two root-knot nematodes.

The following were developed by Jimmie H. Hatchett, USDA-ARS, Dept of Entomology, Waters Hall, Manhattan, Kansas 66506-4004, United States; Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States; P. Stephen Baenziger, University of Nebraska, Department of Agronomy, 362D Plant Science Bldg., Lincoln, Nebraska 68583-0915, United States; David D. Baltensperger, University of Nebraska, Panhandle Research, & Extension Center, Scottsbluff, Nebraska 69361-4939, United States; John E. Watkins, University of Nebraska, Dept. of Plant Pathology, Lincoln, Nebraska 68583, United States; Lenis A. Nelson, University of Nebraska, Department of Agronomy, 342 Keim Hall - E. Campus, Lincoln, Nebraska 68583, United States; Ming-Shun Chen, USDA-ARS-GMPRC-PSERU,

Wheat Insect Genetics Lab, 4008 Throckmorton Hall, Manhattan, Kansas 66506, United States; Yue Jin, USDA, ARS, University of Minnesota, Cereal Disease Lab, St. Paul, Minnesota 55108, United States; Guihua Bai, USDA-ARS, 4008 Throckmorton Hall, Kansas State University, Manhattan, Kansas 66506, United States; Brian Beecher, USDA-ARS, E-202 Food Quality Building, Washington State University, Pullman, Washington 99164-6394, United States. Received 03/24/2005.

PI 638790. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "HALLAM"; NE98471. CV-983. Pedigree - Brule/Bennett//Niobrara. Moderately resistant to stem rust, stripe rust, and Hessian fly. Moderately susceptible to leaf rust. May contain a low level of tolerance to wheat streak mosaic virus. Awned, white-glumed, with field appearance similar to Niobrara and Brule. After heading, the canopy is moderately closed and inclined to nodding. The flag leaf is erect and twisted at the boot stage. The foliage is dark green with a light waxy bloom on the flag leaf, leaf sheath, and spike at anthesis. The leaves are pubescent with very short hairs. The spike is tapering in shape, narrow, mid-long to long, and middense. The glume is midlong and narrow, and the glume shoulder is narrow to midwide and square. The beak is medium in length with an acuminate tip. The spike is inclined to nodding at maturity. Kernels are red colored, hard textured, and mainly elliptical in shape. The kernel has no collar, a large brush of short length, rounded cheeks, large germ, and a narrow and mid-deep crease.

The following were donated by Harbans L. Bhardwaj, Virginia State University, Agriculture Research Station, M.T. Carter Bldg., Room 100, Petersburg, Virginia 23806, United States. Received 09/18/1989.

PI 638791. Phaseolus vulgaris L.
Cultivated. "Negro de San Luis"; W6 1936.

The following were collected by George S. Abawi, Cornell University, Department of Plant Pathology, New York Agr. Exp. Sta., Geneva, New York 14456-0462, United States. Received 11/08/1988.

PI 638792. Phaseolus vulgaris L.
Cultivated. Abawi# 5d; W6 3108. Collected in Peru. Nuna type.

The following were donated by M.A. Tolba, Agricultural Research Center, Food Legume Research Section, Giza, Giza, Egypt. Received 04/03/1992.

PI 638793. Phaseolus vulgaris L.
Wild. W6 10165; GIZA 4.

The following were donated by O.W. Norvell, Stanford University, Palo Alto, California, United States. Received 01/01/1989.

PI 638794. Phaseolus lunatus L.
Uncertain. 3911; W6 10465. Collected in Guatemala.

PI 638795. Phaseolus lunatus L.
Uncertain. 3915; W6 10467. Collected in Guatemala.

PI 638796. Phaseolus lunatus L.
Uncertain. 3932; W6 10470. Collected in Guatemala.

PI 638797. Phaseolus lunatus L.
Uncertain. 4044; W6 10471. Collected in Guatemala.

The following were donated by Soon Jai Park, Agriculture and Agri-Food Canada, Harrow Research Station, 2585 County Road 20, Harrow, Ontario N0R 1G0, Canada. Received 08/03/1992.

PI 638798. Phaseolus vulgaris L.
Cultivar. "OAC LASER"; W6 10670.

PI 638799. Phaseolus vulgaris L.
Cultivar. "OAC RICO"; W6 10671.

PI 638800. Phaseolus vulgaris L.
Cultivar. "OAC SPRINT"; W6 10674.

PI 638801. Phaseolus vulgaris L.
Cultivar. "VISTA"; W6 10676.

The following were donated by Robert E. Rand, University of Wisconsin, Department of Plant Pathology, 1630 Linden Drive, Madison, Wisconsin 53706, United States. Received 08/14/1992.

PI 638802. Phaseolus vulgaris L.
Breeding. MDR 214; W6 10680. Multiple disease resistant processing type beans.

The following were donated by Tong Daxiang, Institute of Crop Germplasm Resources, Chinese Academy of Agricultural Sciences, 30 Bai Shi Qiao Road, Beijing, Beijing, China. Received 02/02/1993.

PI 638803. Phaseolus vulgaris L.
Cultivar. EX. NO. 00037; W6 11335; 84-14 bai zi dao dou.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 06/26/1989.

PI 638804. Phaseolus vulgaris L.
Cultivated. PAK 3; W6 12029. Collected 04/09/1986 in North-West Frontier, Pakistan. Purchased in market (Bazar), Peshawar. Seeds mixture of types and colors.

The following were collected by Tara Luna, P.O. Box 447, East Glacier Park, Montana 59434, United States. Received 06/14/1993.

PI 638805. Phaseolus vulgaris L.
Cultivated. CR-93-007; Frijol Negro; W6 12110. Collected 02/1993 in

Limon, Costa Rica. Latitude 9° 30' N. Longitude 83° 30' W. Elevation 1400 m. Mountain farm near El Chirrip National Park, pueblo San Gerado, San Isidio Province. Soil type clay loam.

The following were collected by Gaylord Mink, Washington State University, Irrigated Agricultural Res. & Ext. Ctr., Route 2, Box 2953-A, Prosser, Washington 99350, United States; James R. Myers, Oregon State University, Department of Horticulture, 4017 Ag Life Sciences Building, Corvallis, Oregon 97331-7304, United States. Received 12/01/1993.

PI 638806. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 1; W6 14717. Collected in Tanzania.

PI 638807. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 2; W6 14718. Collected in Tanzania.

PI 638808. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 12; W6 14719. Collected in Tanzania.

PI 638809. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 7; W6 14720. Collected in Tanzania.

PI 638810. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 6; W6 14721. Collected in Tanzania.

PI 638811. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 22; W6 14722. Collected in Tanzania.

PI 638812. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 10; W6 14723. Collected in Tanzania.

PI 638813. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 11; W6 14724. Collected in Tanzania.

PI 638814. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 5; W6 14725. Collected in Tanzania.

PI 638815. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 20; W6 14726. Collected in Tanzania.

PI 638816. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 8; W6 14727. Collected in Tanzania.

PI 638817. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 13; W6 14728. Collected in Tanzania.

PI 638818. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 14; W6 14729. Collected in Tanzania.

PI 638819. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 15; W6 14730. Collected in Tanzania.

PI 638820. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 16; W6 14731. Collected in Tanzania.

PI 638821. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 4; W6 14733. Collected in Tanzania.

PI 638822. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 18; W6 14736. Collected in Tanzania.

PI 638823. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 19; W6 14737. Collected in Tanzania.

PI 638824. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 21; W6 14738. Collected in Tanzania.

PI 638825. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. RH No. 23; W6 14739. Collected in Tanzania.

The following were donated by Will Bonsall, Scatterseed Project, 39 Bailey Road, Industry, Maine 04938, United States. Received 12/27/1993.

PI 638826. Phaseolus lunatus L.
Cultivar. W6 14863; CLIMBING SPECKLED.

The following were collected by O.W. Norvell, Stanford University, Palo Alto, California, United States. Received 01/01/1989.

PI 638827. Phaseolus sp.
Wild. 1; W6 15571. Collected 1971 in Mexico.

PI 638828. Phaseolus sp.
Wild. 2; W6 15572. Collected 1972 in Mexico.

PI 638829. Phaseolus vulgaris L.
Wild. 3; W6 15573. Collected 1972 in Mexico.

PI 638830. Phaseolus acutifolius A. Gray
Wild. 4; W6 15574. Collected 1955 in Mexico.

PI 638831. Phaseolus sp.
Wild. 5; W6 15575. Collected 1955 in Mexico.

PI 638832. Phaseolus acutifolius A. Gray
Wild. 11; W6 15577. Collected 1955 in Mexico.

PI 638833. Phaseolus acutifolius A. Gray
Wild. 18; W6 15578. Collected 1955 in Mexico.

PI 638834. Phaseolus vulgaris L.
Wild. 307; W6 15583. Collected 1955 in Unknown.

The following were donated by O.W. Norvell, Stanford University, Palo Alto, California, United States. Received 01/01/1989.

PI 638835. Phaseolus acutifolius A. Gray
Uncertain. G40195; 412-4; W6 15622. Collected 1982 in Unknown.

The following were collected by O.W. Norvell, Stanford University, Palo Alto, California, United States. Received 01/01/1989.

PI 638836. Phaseolus glabellus Piper
Uncertain. G40673; HM669; W6 15688. Collected 1948 in Hidalgo, Mexico. Latitude 21° 7' N. Longitude 99° 1' W. Between Palomas & Santa Ana de Allende Rd, at km 313 between Jacala, Hdgo. & Tamozunchale, S.L.P.

The following were donated by O.W. Norvell, Stanford University, Palo Alto, California, United States. Received 01/01/1989.

PI 638837. Phaseolus acutifolius A. Gray
Wild. M917; W6 15715. Collected in Mexico. Collected: Canyon Santa Clara, Chihuahua. About half-way between C. Juarez, Chihuahua (out from Parrita, 283 km from C. Juarez) and Chihuahua City, Chih. and in the mts. some 5 miles west of highway. (from original O. Norvell notes).

PI 638838. Phaseolus acutifolius A. Gray
Uncertain. M924; W6 15719.

PI 638839. Phaseolus acutifolius A. Gray
Wild. M935; W6 15726. Collected in Mexico.

The following were collected by Gaylord Mink, Washington State University, Irrigated Agricultural Res. & Ext. Ctr., Route 2, Box 2953-A, Prosser, Washington 99350, United States. Received 11/16/1994.

PI 638840. Phaseolus vulgaris L.
Cultivated. "KASHEKELEZA"; W6 16583. Collected 1994 in Tanzania. town of Karagwe in the Bukoba region.

The following were donated by F.L. Smith, University of California, Davis, California, United States. Received 01/01/1971.

PI 638841. Phaseolus vulgaris L.
Breeding. 11/46/56; W6 16634. black seed.

The following were donated by Judy VanVleet-Mills, Palouse Empire Marketing, Inc., Moscow, Idaho 83843, United States. Received 1995.

PI 638842. Phaseolus vulgaris L.
Cultivated. W6 16667. Collected 1995 in China. Probably grown in the surrounding provinces of Beijing, Hebei, and Shanxi. Pinto type bean. These are small samples that are distributed by Chinese exporters for potential sale in the United States. The seeds were most likely shipped from the port of Tianjin and were probably grown in the surrounding provinces of Beijing, Hebei, and Shanxi.

PI 638843. Phaseolus vulgaris L.
Cultivated. W6 16668. Collected 1995 in China. Probably grown in surrounding provinces of Beijing, Hebei, and Shanxi. Black, dull sheen

seeds. These are small samples that are distributed by Chinese exporters for potential sale in the United States. The seeds were most likely shipped from the port of Tianjin and were probably grown in the surrounding provinces of Beijing, Hebei, and Shanxi.

PI 638844. Phaseolus vulgaris L.
Cultivated. W6 16674. Collected 1995 in China. Probably grown in the surrounding provinces of Beijing, Hebei, and Shanxi. These are small samples that are distributed by Chinese exporters for potential sale in the U.S. The seeds were most likely shipped from the port of Tianjin and were probably grown in the surrounding provinces of Beijing, Hobei, and Shanxi. White, navy type.

The following were collected by Leon Reese, 1017 NW 12th Street, Pendleton, Washington 97801, United States. Donated by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 04/28/1995.

PI 638845. Phaseolus vulgaris L.
Cultivar. "Armenian Red"; W6 16904. Collected 1994 in Armenia. High-yielding variety with high food qualities. Resistant to bacterial and viral diseases. Brought into commercial production in 1954 and is still the main variety being cultivated. Seed is red in color.

PI 638846. Phaseolus vulgaris L.
Cultivar. "Armenian White"; W6 16905. Collected 1994 in Armenia. High-yielding variety with high food qualities. Resistant to bacterial and viral diseases. Mechanized harvesting is possible. Cultivated commercially. Seed is white in color.

PI 638847. Phaseolus vulgaris L.
Cultivar. "Armenian Asparagus"; W6 16906. Collected 1994 in Armenia. Unique new variety of green beans with high yield and high food qualities. Does not have a parchment layer or seam filament (thread). Seed is black in color.

PI 638848. Phaseolus vulgaris L.
Cultivar. "Mramornaya"; W6 16907. Collected 1994 in Armenia. Pedigree - Hybrid of "Oltin" x "Armenian Asparagus" that was developed in 1972. High yielding variety with high food qualities. Resistant to bacterial diseases. Mechanized harvesting is possible. Seed is brown in color.

The following were collected by James R. Steadman, University of Nebraska, Department of Plant Pathology, 406 Plant Science Hall, Lincoln, Nebraska 68583, United States. Received 05/23/1995.

PI 638849. Phaseolus vulgaris var. aborigineus (Burkart) Baudet
Wild. A-005.01; poroto del Zorro; W6 16999. Collected 04/20/1995 in Argentina. Latitude 23° 28' 43" S. Longitude 64° 56' 49" W. Elevation 1590 m. Valle Grande. In town, edge of rock wall near drainage ditch. Associated with Erythrina.

PI 638850. Phaseolus vulgaris var. aborigineus (Burkart) Baudet
Wild. A-006.01; poroto del Zorro; W6 17002. Collected 04/20/1965 in Argentina. Latitude 23° 28' 55" S. Longitude 64° 56' 48" W. Elevation

1520 m. South of Valle Grande. Stone fence next to maize in farmer's field. Associated vegetation: squash, morning glory, shrubs.

PI 638851. Phaseolus vulgaris L.
Landrace. A-007.01; poroto; W6 17003. Collected 04/21/1995 in Argentina. Latitude 23° 35' 13" S. Longitude 65° 23' 56" W. Elevation 2520 m. Tilcara Botanical Garden, Quebrade Humauca, Jujuy region. Dry area, rocky poor soil, sandy. Associated vegetation: cactus.

PI 638852. Phaseolus vulgaris L.
Landrace. A-008.01; poroto; W6 17004. Collected 04/21/1995 in Argentina. Latitude 23° 42' 14" S. Longitude 65° 32' 17" W. Elevation 2610 m. Purmanarca valley, Jujuy region. Secondino Lopez-farmer. Sloped, stoney clay. Associated vegetation: peaches, apples.

PI 638853. Phaseolus vulgaris L.
Wild. A-009.01; poroto; W6 17005. Collected 04/21/1995 in Argentina. Latitude 23° 42' 20" S. Longitude 65° 31' 58" W. Elevation 2700 m. Purmanarca Valley, Jujuy region. Farmer: Sr. Mercado. Stoney clay, garden field. Associated vegetation: corn, fruit trees.

PI 638854. Phaseolus vulgaris var. aborigineus (Burkart) Baudet
Wild. A-011.02; poroto del Zorro; W6 17011. Collected 04/22/1995 in Argentina. Latitude 24° 40' 47" S. Longitude 65° 28' 35" W. Elevation 1440 m. Nearest town: Lesser. Roadside. No tall trees. Rocky, sandy, loam soil. Near cattle grazing fields. Associated vegetation: spiny shrubs.

PI 638855. Phaseolus vulgaris var. aborigineus (Burkart) Baudet
Wild. A-012.01; poroto del Zorro; W6 17012. Collected 04/22/1995 in Argentina. Latitude 24° 39' 2" S. Longitude 65° 29' 5" W. Elevation 1590 m. Nearest town: Lesser. Near a river/roadside, spiny shrubs/trees, weeds.

PI 638856. Phaseolus vulgaris L.
Wild. G21057; A-007.01; poroto del Zorro; W6 17013. Collected 04/21/1995 in Argentina. Latitude 23° 39' S. Longitude 65° 25' W. Elevation 2460 m. Nearest town: Hornillos, Jujuy region. Quebrada Humavaca. Vine.

PI 638857. Phaseolus vulgaris L.
Landrace. G00917; A-007.02; W6 17014. Collected 04/21/1995 in Argentina. Latitude 23° 39' S. Longitude 65° 25' W. Elevation 2460 m. Nearest town: Hornillos, Jujy region. Quebrada Humavaca. Vine.

PI 638858. Phaseolus vulgaris L.
Landrace. G13979; A-007.10; W6 17022. Collected 04/21/1995 in Argentina. Latitude 23° 39' S. Longitude 65° 25' W. Elevation 2460 m. Hornillos.

PI 638859. Phaseolus vulgaris L.
Landrace. G13982; A-007.11; W6 17023. Collected 04/21/1995 in Argentina. Latitude 23° 39' S. Longitude 65° 25' W. Elevation 2460 m. Hornillos.

PI 638860. Phaseolus vulgaris L.
Landrace. G11844; A-007.14; W6 17026. Collected 04/21/1995 in Argentina. Latitude 23° 39' S. Longitude 65° 25' W. Elevation 2460 m. Hornillos.

PI 638861. Phaseolus vulgaris L.
Landrace. G13949; A-007.15; W6 17027. Collected 04/21/1995 in Argentina. Latitude 23° 39' S. Longitude 65° 25' W. Elevation 2460 m. Hornillos.

PI 638862. Phaseolus vulgaris L.
Landrace. G21053; A-007.18; W6 17030. Collected 04/21/1995 in Argentina. Latitude 23° 39' S. Longitude 65° 25' W. Elevation 2460 m. Hornillos.

PI 638863. Phaseolus vulgaris L.
Landrace. G14008; A-007.21; W6 17033. Collected 04/21/1995 in Argentina. Latitude 23° 39' S. Longitude 65° 25' W. Elevation 2460 m. Hornillos.

The following were collected by Roberto Neumann, Instituto Nacional de Tecnologia Agropecuaria, C.C. 228, Salta, Salta 4400, Argentina. Received 1995.

PI 638864. Phaseolus vulgaris L.
Wild. W6 17466. Collected 04/1995 in Tucuman, Argentina. Latitude 26° 13' 59" S. Longitude 65° 28' 59" W. Elevation 1380 m. Going to Hualinchay, in a ravine (barranca) on the left-hand side. San Pedro Colalao. From one plant, bright seed, anthracnose.

PI 638865. Phaseolus vulgaris L.
Wild. W6 17467. Collected 04/1995 in Argentina. Latitude 26° 13' 1" S. Longitude 65° 31' 36" W. Elevation 1260 m. Rio Rearte. Trancas, Tucuman.

PI 638866. Phaseolus vulgaris L.
Wild. W6 17468. Collected 04/1995 in Argentina. Latitude 27° 49' S. Longitude 65° 47' W. Elevation 1560 m. 10 km north of the junction between Balcozna and Singuil. Tucuman.

PI 638867. Phaseolus vulgaris L.
Wild. W6 17469. Collected 04/1995 in Argentina. Latitude 27° 47' 49" S. Longitude 65° 47' 6" W. Elevation 1110 m. 61 km from the border of Tucuman. Balcozno, Tucuman. Mixed sample, pubescent leaves, anthracnose, angular leaf spot, bruchids.

PI 638868. Phaseolus vulgaris L.
Wild. W6 17471. Collected 04/1995 in Argentina. Latitude 26° 23' S. Longitude 65° 32' W. Elevation 1380 m. 2.5 km from the junction of Gonzalo to Higuere. Tucuman. Mixed sample.

PI 638869. Phaseolus vulgaris L.
Wild. W6 17472. Collected 04/1995 in Argentina. Latitude 26° 57' S. Longitude 65° 42' W. Elevation 2070 m. In a riverbed. Mollar, Tafi del Valle, Tucuman.

The following were collected by Craig Sandlin, University of Nebraska, Department of Plant Pathology, Lincoln, Nebraska 68583-0722, United States; Marcelo Salgado, Instituto Nacional de Tecnologia Agropecuaria, C.C. 228, Salta, Salta 4400, Argentina; Roberto Neumann, Instituto Nacional de Tecnologia Agropecuaria, C.C. 228, Salta, Salta 4400, Argentina. Received 1995.

PI 638870. Phaseolus vulgaris L.
Wild. W6 17473. Collected 04/1995 in Argentina. Latitude 26° 6' S. Longitude 65° 36' W. Elevation 1350 m. Los Laureles. Quebrada de Escoipe, Salta. Collected from plants growing in tall brush. Cologonium sp. collected at the same site. Seeds collected from several plants. Web blight, anthracnose, angular leaf spot and powdery mildew were observed.

PI 638871. Phaseolus vulgaris L.
Wild. W6 17475. Collected 04/1995 in Argentina. Latitude 25° 10' S. Longitude 65° 37' W. Elevation 1470 m. El Nogalar. Salta. Growing in tall brush, north-facing exposure, near a small stream. Seeds collected from several plants. Anthracnose was observed.

PI 638872. Phaseolus vulgaris L.
Wild. W6 17476. Collected 04/1995 in Argentina. Latitude 25° 9' 58" S. Longitude 65° 38' 57" W. Elevation 1530 m. Pena Baya, Salta. Growing in mountain chaco (mixed grass and brush), northwest-facing exposure. Soil was a calcareous mix of sand and gravel. Seeds collected from several plants. Anthracnose was observed.

PI 638873. Phaseolus vulgaris L.
Wild. W6 17478. Collected 04/1995 in Argentina. Latitude 24° 53' 46" S. Longitude 65° 48' 3" W. Elevation 1620 m. Entrada a la Quebrada del Toro, Salta. Growing in tall brush with both north- and south-facing exposure. Seed collected from several plants. Anthracnose was observed, as was angular leaf spot on the south facing plants.

PI 638874. Phaseolus vulgaris L.
Wild. W6 17481. Collected 05/1995 in Argentina. Latitude 22° 16' S. Longitude 64° 41' W. Elevation 1650 m. Los Toldos, Jujuy. Growing in tall brush along the stream that runs through town. Seeds collected from several plants.

PI 638875. Phaseolus vulgaris L.
Wild. W6 17486. Collected 05/1995 in Argentina. Latitude 22° 16' S. Longitude 64° 41' W. Elevation 1650 m. Los Toldos, Jujuy. The house of Sra. Determina Ruiz. Growing in tall brush next to a small plot enclosed by a brick wall where landrace beans and corn were being grown. The landrace beans appeared to have out crossed with the wild ones.

PI 638876. Phaseolus lunatus L.
Landrace. W6 17497. Collected 05/1995 in Argentina. Latitude 23° 8' S. Longitude 64° 20' W. Elevation 600 m. El Oculto, Oran, Salta. The house of Sr. Fealix Laime. Seed was from large, perennial plants grown in an arbor in front of the house.

The following were donated by Michael Dickson, New York State Agricultural Exper. Sta., Department of Horticultural Sci., Hedrick Hall - Cornell University, Geneva, New York 14456-0462, United States. Received 12/28/1995.

PI 638877. Phaseolus vulgaris L.
Cultivated. "CORNELL 2114-12c"; W6 17635. This is a brown version of PI 409101 and had added genes for: Fusarium, Rhizoctonia, Pythium, Theleviopsis, and Seed Corn Maggot resistance.

The following were collected by Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Edward J. Garvey, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 409, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States; Lufter Xhuveli, Agricultural University of Tirana, Dept. of Agronomy, Rr."Myslym Shyri", Tirana, Albania. Received 09/1996.

PI 638878. Phaseolus vulgaris L.
Cultivated. Al 002; "SHIJAK"; W6 18613. Collected 08/24/1996 in Albania. Latitude 41° 3' 43" N. Longitude 19° 39' 15" E. Elevation 40 m. Road to Lushnje, just beyond the Bridge of Rragozhina, market. Produced in Dushku, Lushnja District. Old landrace adapted to Albania. Reported to have been grown in Albania for over 300 years.

PI 638879. Phaseolus vulgaris L.
Landrace. Al 013; FASULE 40 DITE-SHE; W6 18617. Collected 08/24/1996 in Albania. Latitude 40° 38' N. Longitude 19° 31' E. Elevation 20 m. South of Fier, Novosele, home of M. Beqo, relatives of Lufter Xhuveli. Shared from stored seed supply from home garden. Short, bush type, matures in 40 days, 3-4 harvests/year. Seed coat black, eye white.

The following were collected by James R. Steadman, University of Nebraska, Department of Plant Pathology, 406 Plant Science Hall, Lincoln, Nebraska 68583, United States; Roberto Neumann, Instituto Nacional de Tecnologia Agropecuaria, C.C. 228, Salta, Salta 4400, Argentina. Received 10/1996.

PI 638880. Phaseolus vulgaris var. aborigineus (Burkart) Baudet
Wild. A2-001-1; Poroto del campo; W6 18731. Collected 05/05/1996 in Argentina.

PI 638881. Phaseolus vulgaris var. aborigineus (Burkart) Baudet
Wild. A2-007-1; W6 18741. Collected 05/07/1996 in Argentina.

PI 638882. Phaseolus vulgaris var. aborigineus (Burkart) Baudet
Wild. A2-009-1; W6 18744. Collected 05/07/1996 in Argentina.

PI 638883. Phaseolus vulgaris var. aborigineus (Burkart) Baudet
Wild. A2-012; W6 18748. Collected 05/07/1996 in Argentina.

PI 638884. Phaseolus vulgaris var. aborigineus (Burkart) Baudet
Wild. A2-013-1; W6 18749. Collected 05/07/1996 in Argentina.

PI 638885. Phaseolus vulgaris L.
Landrace. A2-014-1; Poroto chaucha; W6 18750. Collected 05/08/1996 in Argentina.

PI 638886. Phaseolus vulgaris L.
Landrace. A2-015-1; Poroto; W6 18753. Collected 05/08/1996 in Argentina.

PI 638887. Phaseolus vulgaris L.
Landrace. A2-017-2; W6 18756. Collected 05/09/1996 in Argentina.

PI 638888. Phaseolus vulgaris L.
Landrace. A2-019-1; Poroto overo; W6 18758. Collected 05/09/1996 in Argentina.

PI 638889. Phaseolus vulgaris var. aborigineus (Burkart) Baudet
Wild. A2-019-2; W6 18759. Collected 05/09/1996 in Argentina.

The following were donated by Dermot P. Coyne, University of Nebraska, Department of Horticulture, 386 Plant Sciences Hall, Lincoln, Nebraska 68583-0724, United States. Received 10/23/1996.

PI 638890. Phaseolus vulgaris L.
Uncertain. MW24; W6 18785.

The following were collected by James R. Steadman, University of Nebraska, Department of Plant Pathology, 406 Plant Science Hall, Lincoln, Nebraska 68583, United States; Roberto Neumann, Instituto Nacional de Tecnologia Agropecuaria, C.C. 228, Salta, Salta 4400, Argentina. Received 10/1996.

PI 638891. Phaseolus vulgaris var. aborigineus (Burkart) Baudet
Wild. A2-002-4; W6 18789. Collected 05/06/1996 in Argentina.

PI 638892. Phaseolus vulgaris L.
Landrace. A2-016-5; W6 18792. Collected 05/08/1996 in Argentina.

PI 638893. Phaseolus vulgaris L.
Landrace. A2-016-6; W6 18793. Collected 05/08/1996 in Argentina.

PI 638894. Phaseolus vulgaris L.
Landrace. A2-016-7; W6 18794. Collected 05/08/1996 in Argentina.

PI 638895. Phaseolus vulgaris L.
Landrace. A2-016-8; W6 18795. Collected 05/08/1996 in Argentina.

PI 638896. Phaseolus vulgaris L.
Landrace. A2-019-1.2; W6 18796. Collected 05/09/1996 in Argentina.

The following were collected by Daniel G. Debouck, Research Board for, International Board for, Plant Genetic Resources, Rome, Latium 00145, Italy; Paul Gepts, University of California, Dept. of Agronomy & Range Science, Davis, California 95616-8515, United States; L. Guzman, Cent. de Invest. Fitoecogeneticas de Pairumani, Casilla, Cochabamba 128, Bolivia; Raul Rios, Centro de Investigaciones Fitoecogeneticas de Pairumani, Casilla 128, Casilla, Cochabamba, Bolivia. Received 07/1996.

PI 638897. Phaseolus vulgaris L.
Wild. DGD 3038; W6 18821. Collected 05/15/1994 in Chuquisaca, Bolivia. Latitude 19° 17' S. Longitude 64° 20' W. Elevation 2140 m. Near town of Tomina. Sillani. 14 km west Padilla.

PI 638898. Phaseolus vulgaris L.
Wild. DGD 3044; W6 18826. Collected 05/15/1994 in Chuquisaca, Bolivia. Latitude 19° 17' S. Longitude 64° 20' W. Elevation 2140 m. Near town of Tomina. Sillani. 14 km west Padilla.

The following were developed by J. Rennie Stavely, USDA, ARS, Microbiology and Plant Pathology Lab., Room 252, Building 011A, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 12/09/1996.

PI 638899. Phaseolus vulgaris L.
Cultivated. "Kentucky Wonder 765 (differential)"; W6 18973. Bean differential for bean rust (Uromyces appendiculatus).

PI 638900. Phaseolus vulgaris L.
Cultivated. "Kentucky Wonder 814 (differential)"; W6 18975. Bean differential for bean rust (Uromyces appendiculatus).

PI 638901. Phaseolus vulgaris L.
Cultivated. "Compuestro Negro Chimaltenango"; W6 18988. Bean differential for bean rust (Uromyces appendiculatus).

The following were collected by Karen A. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 402, BARC-West, Beltsville, Maryland 20705-2350, United States; Cesar Tapia, Instituto Nacional Autonomo de Investigaciones Agropecuarias, Departamento Nacional de Recusos Fitogeneticos Y Biotecnolog, Estacion Experimental Sta. Catalina, Santa Catalina, Pichincha, Ecuador. Received 12/1996.

PI 638902. Phaseolus vulgaris L.
Cultivated. WTS-4; frijol leche; W6 18990. Collected 08/23/1996 in Imbabura, Ecuador. Latitude 0° 34' 22" N. Longitude 78° 8' 4" W. Elevation 1490 m. Canton Urcuqui, Parroquia Cawasqui, Localidad Cuambo. Dry hillside farm. 5-6 seeds per fruit, seeds white when fresh and dry. Said to be a bush variety (plants not observed). Seeds elongate. Local variety. Planted in May, harvested in July. Eaten fresh. Farmer sells seed at market. Tomatoes grown commercially at this farm. Obtained from mestiszo farmer.

The following were collected by Charles E. Simpson, Texas A&M University, P. O. Box 292, Stephenville, Texas 76401, United States; Karen A. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 402, BARC-West, Beltsville, Maryland 20705-2350, United States; Cesar Tapia, Instituto Nacional Autonomo de Investigaciones Agropecuarias, Departamento Nacional de Recusos Fitogeneticos Y Biotecnolog, Estacion Experimental Sta. Catalina, Santa Catalina, Pichincha, Ecuador. Received 12/1996.

PI 638903. Phaseolus vulgaris L.
Cultivated. WTS-104; frijol panamito; W6 18991. Collected 09/03/1996 in Morona-Santiago, Ecuador. Latitude 2° 18' 38" S. Longitude 78° 7' 7" W. Elevation 1110 m. Canton Macas, Localidad Macas. Purchased in a store. White seeds. Local variety in the Ecuadoran Amazon.

The following were collected by George A. White, USDA-ARS, Beltsville Agricultural Research Ctr., Bldg. 001, 3rd Floor, Barc-West, Beltsville, Maryland 20705, United States. Received 11/28/1994.

PI 638904. Phaseolus vulgaris L.
Uncertain. W6 19053. Collected 11/09/1994 in Albania. From street market in town of Lushnje. Seeds white, dry market type. Seeds were infested with insects but went through quarantine.

The following were collected by Mary Sams, Dundee Narrows Rd., Narrows, Kentucky 42358-9757, United States. Donated by Robert Falasca, American Seed Trade Association, Inc., 601 13th St., N.W., Suite 570 South, Washington, District of Columbia 20005-3807, United States. Received 11/1994.

PI 638905. Phaseolus vulgaris L.
Landrace. Corn Field Bean; W6 19104. Collected 11/1994 in Kentucky, United States. Have been grown for many generations by Ms. Sam's family in Kentucky.

PI 638906. Phaseolus vulgaris L.
Landrace. W6 19105. Collected 11/1994 in Kentucky, United States. Have been grown for many generations by Ms. Sam's family in Kentucky.

The following were collected by Ralph Hollin, R.R. #8, Box 48, Manchester, Kentucky 40962, United States. Received 03/1995.

PI 638907. Phaseolus vulgaris L.
Cultivated. Greasy Beans; W6 19916. Collected 02/1995 in Kentucky, United States. Grown in Hollin family for 3 generations. Beans grow in clusters or bunches of 5-6 beans. Tiny rust spots will appear on some beans but disappear when cooked. Used for canning and for making 'shuck beans', a treat for mountain folk.

The following were collected by Gary Nabhan, Native Seeds/SEARCH, 3950 W. New York Drive, Tucson, Arizona 85745, United States. Received 1985.

PI 638908. Phaseolus acutifolius var. tenuifolius A. Gray
Cultivated. GN 743; W6 20114. Collected 1985.

PI 638909. Phaseolus acutifolius A. Gray
Wild. GN 84118; W6 20127. Collected 1985 in Chihuahua, Mexico. Latitude 27° 4' N. Longitude 107° 40' W. Elevation 700 m. 11 km east of Batopilas. Canyon, north aspect. Boulder and scree soil. Mean plant length >500 cm. Indeterminate climber.

PI 638910. Phaseolus acutifolius A. Gray
Wild. GN 84119; W6 20129. Collected 1985 in Chihuahua, Mexico. Latitude 27° 5' N. Longitude 107° 39' W. Elevation 1010 m. 19 km west of La Bufa. Canyon area. 30-45% northeast slope.

PI 638911. Phaseolus acutifolius var. tenuifolius A. Gray
Wild. GN 84128; BB 8481; W6 20140. Collected 1985 in Chihuahua, Mexico. Latitude 26° 49' 12" N. Longitude 106° 21' W. Elevation 1700 m. 14 km south of Balleza. Mean plant length 30-100 cm. Indeterminate climber.

PI 638912. Phaseolus acutifolius var. tenuifolius A. Gray
Cultivated. GN 8475; BB 8422; W6 20144. Collected 1985 in Chihuahua,

Mexico. Latitude 29° 12' N. Longitude 108° 22' 12" W. Elevation 1850 m. 25 km west of Madera, Rio Papagochic.

PI 638913. Phaseolus acutifolius A. Gray **var. acutifolius**
Wild. GN 700; W6 20145. Collected 1985.

PI 638914. Phaseolus vulgaris L.
Cultivated. GN 823; W6 20155. Collected 02/26/1978 in Arizona, United States. Latitude 35° 46' 59" N. Longitude 110° 30' W. Mrs. Jackson, Lower Moenkopi, Hopi Reservation. Grown without irrigation near Moenkopi. Pink/purple beans.

The following were collected by Cesar Azurdia, Instituto de Investigaciones Agronomicas, Universidad de San Carlos de Guatemala, Ciudad Universitaria, Zona 12, Guatemala City, Guatemala, Guatemala; Daniel Debouck, International Center for Tropical Agriculture, Germplasm Resources Unit, Apdo. aereo 6713, Cali, Valle, Colombia. Donated by Helmer Ayala, Universidad de San Carlos de Guatemala, Ciudad Universitaria, Zona 12, Apartado Postal No 1545, San Carlos, Guatemala. Received 01/15/1998.

PI 638915. Phaseolus vulgaris L.
Wild. 3075; W6 20517. Collected 01/1995 in Guatemala. Latitude 15° 39' N. Longitude 91° 42' W. Elevation 1540 m. Jacaltenango, 4 km west southwest of Jacaltenango.

PI 638916. Phaseolus vulgaris L.
Wild. 3083; W6 20523. Collected 01/1995 in Guatemala. Latitude 14° 46' N. Longitude 91° 31' W. Elevation 1760 m. Zunil, 1.5 km northeast of Estancia de la Cruz, Aguas Amargas.

Unknown source. Received 01/1998.

PI 638917. Phaseolus vulgaris L.
Cultivated. W6 20638.

The following were donated by Dermot P. Coyne, University of Nebraska, Department of Horticulture, 386 Plant Sciences Hall, Lincoln, Nebraska 68583-0724, United States. Received 08/24/1994.

PI 638918. Phaseolus vulgaris L.
Cultivated. Chijor-34; W6 21937. coleccion Pompadour Nueva.

PI 638919. Phaseolus vulgaris L.
Cultivated. Derrumba-15; W6 21945. coleccion Pompadour Nueva.

PI 638920. Phaseolus vulgaris L.
Cultivated. Derrumba-17; W6 21946. coleccion Pompadour Nueva.

PI 638921. Phaseolus vulgaris L.
Cultivated. Derrumba-20; W6 21947. coleccion Pompadour Nueva.

The following were developed by Dermot P. Coyne, University of Nebraska, Department of Horticulture, 386 Plant Sciences Hall, Lincoln, Nebraska 68583-0724, United States. Received 06/27/2000.

PI 638922. Phaseolus vulgaris L.
Cultivar. "STARLIGHT"; W6 22540. High yielding with moderate upright growth habit (type IIa), very large bright white seed (32-40 g/100 seed), and medium maturity (88-93 days). Possesses multiple disease resistance to rust (Uromyces appendiculatus) (UR-3 gene), and to the bacterial pathogens causing common blight (Xanthomonas campestris), halo blight (Pseudomonas syringae), and moderate avoidance to white mold (Sclerotinia sclerotiorum) due to upright and porous plant canopy. Susceptible to bean common mosaic virus.

The following were donated by Good Seed Co., P.O. Box 702, Tonasket, Washington 98855, United States. Received 04/28/2001.

PI 638923. Phaseolus acutifolius A. Gray
Cultivated. T-241 White; W6 23472.

PI 638924. Phaseolus acutifolius A. Gray
Cultivated. T-242 Brown; W6 23473.

PI 638925. Phaseolus acutifolius A. Gray
Cultivated. T-243 Brown Speckles; W6 23474.

PI 638926. Phaseolus acutifolius A. Gray
Cultivated. T-246 Blue Speckles; W6 23475.

The following were collected by Jerry Kaiser, U.S. Department of Agriculture, Natural Resources Conservation Service, 2803 N. Hwy 79, Elsberry, Missouri 63343, United States. Donated by Mathew B. Johnson, University of Arizona, Desert Legume Program, 2120 East Allen Road, Tucson, Arizona 85719, United States. Received 10/2001.

PI 638927. Phaseolus acutifolius A. Gray
Wild. DLEG 900643; W6 23668. Collected 09/20/1990 in Arizona, United States. Received without data from Jack Kaiser.

The following were collected by D. Palzkill, United States. Donated by Mathew B. Johnson, University of Arizona, Desert Legume Program, 2120 East Allen Road, Tucson, Arizona 85719, United States. Received 10/2001.

PI 638928. Phaseolus acutifolius A. Gray
Wild. DLEG 900680; W6 23669. Collected 10/30/1990 in Arizona, United States. Latitude 32° 12' 29" N. Longitude 109° 34' 30" W. Cochise Co., South of Bowie, Dos Cabezas Mountains. In canyon among rocks supporting a population of Simmondsia chinensis. Interesting area with several disjuct plant populations.

The following were donated by Harold Erdmann, 23478 State Road 35, Siren, Wisconsin 54872, United States; Elmer & Diane Wickland, 23351 County Road Y, Grantsburg, Wisconsin 54840-9025, United States. Received 05/27/2003.

PI 638929. Phaseolus vulgaris L.
Cultivated. Clem & Sarah's Big Bean; Grandma Robert's Bean; Sarah Bean; W6 24321. This bean is originally from the Roberts family in Sterling Township, Polk County, Wisconsin (around) 1909. Via Burnett County and Grantsburg Wisconsin to granddaugther Sarah Roberts, who with her husband Clem Harman, grew the bean for about fifty years. The bean was givento Diane & Elmer Wickland around 1980. They shared it with Harold Erdmann. Around 1990the bean was given to Ann Gilson and she listed it in the Seed Savers Exchange where it was carried for a short time. The bean is said to be easy to digest and to have a flavor similar to Great Northern, but milder. Wisconsin donors indicate, it does not store well and have trouble growing if stored too long, no problems with disease or insert pests and most years they can get dry beans.

The following were donated by G.A. Niles, Tobaco & Cotton Research Inst., Private Bag X82075, Republic of South Africa, Rustenburg, Transvaal 0300, South Africa. Received 06/10/1989.

PI 638930. Hibiscus cannabinus L.
Cultivated. 74200 I4; Grif 1540.

The following were donated by Charles G. Cook, USDA, ARS, Subtrop. Agric. Res. Lab., 2413 E. Highway 83, Weslaco, Texas 78596, United States. Received 09/25/1996.

PI 638931. Hibiscus cannabinus L.
Cultivar. "7804"; Grif 13791. Developed in China.

PI 638932. Hibiscus cannabinus L.
Cultivar. "Yue 74-3"; Grif 13792. Developed in China.

The following were donated by G.A. Niles, Tobaco & Cotton Research Inst., Private Bag X82075, Republic of South Africa, Rustenburg, Transvaal 0300, South Africa. Received 06/10/1989.

PI 638933. Hibiscus sabdariffa L.
Cultivated. 72240 G16; Grif 1541.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 07/19/1989.

PI 638934. Centrosema acutifolium Benth.
5277; Grif 11493. Collected in Unknown.

PI 638935. Centrosema acutifolium Benth.
15287; Grif 11494. Collected in Unknown.

PI 638936. Centrosema brasilianum (L.) Benth.
5234; Grif 11495. Collected in Unknown.

PI 638937. Centrosema brasilianum (L.) Benth.
5657; Grif 11496. Collected in Unknown.

PI 638938. Centrosema grazielae V. P. Barbosa
4042; Grif 11497. Collected in Unknown.

PI 638939. Centrosema macrocarpum Benth.
5713; Grif 11498. Collected in Unknown.

PI 638940. Centrosema macrocarpum Benth.
15061; Grif 11499. Collected in Unknown.

PI 638941. Centrosema macrocarpum Benth.
15806; Grif 11500. Collected in Unknown.

PI 638942. Centrosema pascuorum Mart. ex Benth.
5217; Grif 11501. Collected in Unknown.

PI 638943. Centrosema pascuorum Mart. ex Benth.
5230; Grif 11502. Collected in Unknown.

PI 638944. Centrosema plumieri (Turpin ex Pers.) Benth.
15505; Grif 11507. Collected in Unknown.

PI 638945. Centrosema pubescens Benth.
413; Grif 11503. Collected in Unknown.

PI 638946. Centrosema pubescens Benth.
438; Grif 11504. Collected in Unknown.

PI 638947. Centrosema pubescens Benth.
442; Grif 11505. Collected in Unknown.

PI 638948. Centrosema pubescens Benth.
5189; Grif 11506. Collected in Unknown.

PI 638949. Centrosema schiedeanum (Schltdl.) R. J. Williams & R. J. Clem.
5159; Grif 11513. Collected in Unknown.

PI 638950. Centrosema schottii (Millsp.) K. Schum.
5091; Grif 11508. Collected in Unknown.

PI 638951. Centrosema schottii (Millsp.) K. Schum.
5092; Grif 11509. Collected in Unknown.

PI 638952. Centrosema sp.
5038; Grif 11510. Collected in Unknown.

PI 638953. Centrosema sp.
5076; Grif 11511. Collected in Unknown.

PI 638954. Centrosema sp.
5112; Grif 11512. Collected in Unknown.

PI 638955. Centrosema sp.
5175; Grif 11514. Collected in Unknown.

PI 638956. Centrosema sp.
5236; Grif 11515. Collected in Unknown.

PI 638957. Centrosema sp.
5278; Grif 11516. Collected in Unknown.

PI 638958. Centrosema sp.
5452; Grif 11517. Collected in Unknown.

PI 638959. Centrosema sp.
5568; Grif 11518. Collected in Unknown.

PI 638960. Centrosema sp.
15087; Grif 11519. Collected in Unknown.

PI 638961. Centrosema sp.
15172; Grif 11520. Collected in Unknown.

PI 638962. Centrosema sp.
15445; Grif 11521. Collected in Unknown.

PI 638963. Centrosema tetragonolobum Schultze-Kraft & R. J. Williams
15089; Grif 11522. Collected in Unknown.

The following were collected by J.D. Powell, SCS, Americus, Georgia, United States. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638964. Chamaecrista fasciculata (Michx.) Greene
9021320; Grif 7783. Collected in Georgia, United States. Various locations in Georgia.

The following were collected by B. Cook. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638965. Chamaecrista fasciculata (Michx.) Greene
9021660; MS 4838; Grif 7784. Collected 10/01/1980 in Arkansas, United States. MLRA 133B, Columbia County, Arkansas.

The following were donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638966. Chamaecrista fasciculata (Michx.) Greene
9028306; MS 5159; Grif 7789. Composite without collection data.

The following were collected by Bailey; Harris. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638967. Chamaecrista fasciculata (Michx.) Greene
9028354; MS 5372; Grif 7790. Collected 09/01/1982 in Arkansas, United States. MLRA 116A, Boone County, Arkansas. Composite from NW Arkansas.

The following were donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638968. Chamaecrista fasciculata (Michx.) Greene
9028367; MS 5385; Grif 7791. Collected 10/01/1982 in Arkansas, United States. MLRA 131, Ashley County, Arkansas.

The following were collected by Villines. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638969. Chamaecrista fasciculata (Michx.) Greene
Lark Selection; 9028375; MS 5418; Grif 7792. Collected 10/01/1982 in Arkansas, United States. MLRA 134, Lee County, Arkansas.

The following were donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638970. Chamaecrista fasciculata (Michx.) Greene
9028379; MS 5421; Grif 7793. Collected 10/01/1982 in Mississippi, United States. MLRA 131, Tallahatchie, Mississippi. Collected in vicinity of Coffeeville Plant Materials Center.

The following were collected by Presley. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638971. Chamaecrista fasciculata (Michx.) Greene
9028380; MS 5422; Grif 7794. Collected 10/01/1982 in Mississippi, United States. MLRA 131, Sharkey County, Mississippi.

The following were donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638972. Chamaecrista fasciculata (Michx.) Greene
9028390; MS 5432; Grif 7795. Collected 10/01/1982 in Arkansas, United States. MLRA 131, Lincoln County, Arkansas.

The following were collected by B. Cook. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638973. Chamaecrista fasciculata (Michx.) Greene
9028393; MS 5435; Grif 7796. Collected 10/01/1982 in Arkansas, United States. MLRA 133B, Composite from South Central, Arkansas.

The following were collected by Chapman. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638974. Chamaecrista fasciculata (Michx.) Greene
9028396; MS 5438; Grif 7797. Collected 10/01/1982 in Arkansas, United States. MLRA 133B, Dallas County, Arkansas Dallas County.

The following were collected by Shaw. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638975. Chamaecrista fasciculata (Michx.) Greene
9028400; MS 5442; Grif 7798. Collected 10/01/1982 in Mississippi, United States. MLRA 133. Composite from Central Mississippi.

The following were collected by P. Dillard. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638976. Chamaecrista fasciculata (Michx.) Greene
9028410; MS 5452; Grif 7799. Collected 10/01/1982 in Mississippi, United States. MLRA 133C. Composite from South Mississippi.

The following were collected by George Dobbins, 2504 N. Rockwell, #118, Bethany, Oklahoma 73008, United States; D. Vanderburg. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638977. Chamaecrista fasciculata (Michx.) Greene
9028414; MS 5456; Grif 7800. Collected 10/01/1982 in Arkansas, United States. MLRA 133B, Miller County, Arkansas.

The following were collected by T.G. Heard. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638978. Chamaecrista fasciculata (Michx.) Greene
9028427; MS 5496; Grif 7801. Collected 10/01/1982 in Mississippi, United States. MLRA 134. Composite from Loess Hill, Central Mississippi.

The following were collected by L. Foote. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638979. Chamaecrista fasciculata (Michx.) Greene
9028449; MS 5518; Grif 7802. Collected 09/01/1982 in Arkansas, United States. MLRA 131, Mississippi County, Arkansas. 7803.

The following were collected by T. Bunch. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638980. Chamaecrista fasciculata (Michx.) Greene
9028451; MS 5520; Grif 7803. Collected 10/01/1982 in Arkansas, United States. MLRA 134. Composite from Crowleys Ridge, Arkansas.

The following were collected by A. Irvin. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638981. Chamaecrista fasciculata (Michx.) Greene
9028475; MS 5549; Grif 7804. Collected 12/01/1982 in Louisiana, United States. MLRA 133B, Rapides County, Louisiana.

The following were collected by M. May. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638982. Chamaecrista fasciculata (Michx.) Greene
9028480; MS 5554; Grif 7805. Collected 10/01/1982 in Louisiana, United States. MLRA 134.

The following were collected by S. Anderson. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638983. Chamaecrista fasciculata (Michx.) Greene
9028482; MS 5556; Grif 7806. Collected 10/01/1982 in Louisiana, United States. MLRA 131, West Baton Rouge County, Louisiana.

The following were collected by K. Goodwin. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638984. Chamaecrista fasciculata (Michx.) Greene
9028593; MS 5906; Grif 7807. Collected 10/01/1984 in Mississippi, United States. MLRA 134, Jefferson Davis County, Mississippi.

The following were collected by Cagle; Bigham. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638985. Chamaecrista fasciculata (Michx.) Greene
9028436; MS 5505; Grif 7811. Collected 10/01/1982 in Arkansas, United States. MLRA 134. Composite from SE Arkansas.

The following were collected by H.J. Haynsworth. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638986. Chamaecrista nictitans (L.) Moench
9021321; MS 4823; Grif 7812. Collected in Georgia, United States. Oconee County.

The following were collected by M. Manning. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638987. Chamaecrista nictitans (L.) Moench
9028238; MS 5091; Grif 7813. Collected 10/01/1981 in Mississippi, United States. MLRA 133, Forrest County, Mississippi.

The following were collected by Creel; Blackwell. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638988. Chamaecrista nictitans (L.) Moench
9028318; MS 5171; Grif 7814. Collected 10/01/1981 in Louisiana, United States. MLRA 133, Washington County, Louisiana.

The following were collected by J. Tapp. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638989. Chamaecrista nictitans (L.) Moench
9028923; Grif 7815. Collected 10/01/1981 in Arkansas, United States. Sebastian County, Arkansas. Composite from NW Arkansas.

The following were collected by Bailey; Harris. Donated by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Received 01/18/1991.

PI 638990. Chamaecrista nictitans (L.) Moench
9028925; MS 5050; Grif 7816. Collected 10/01/1981 in Arkansas, United States. MLRA 116A, Boone County, Arkansas.

The following were developed by Primac Seed Company, Australia. Donated by Tim L. Springer, USDA, ARS, South Central Family Farms Research, 6883 South State Highway 23, Booneville, Arkansas 72927-9214, United States. Received 06/28/1991.

PI 638991. Chamaecrista rotundifolia (Pers.) Greene **var. rotundifolia**
Grif 1648. Collected in Australia.

The following were donated by Cindy Wildeus, University of Virgin Islands, Kingshill, St. Croix 008850, Virgin Islands (U.S.); CSIRO, Division of Plant Industry, General Post Office Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Received 08/22/1989.

PI 638992. Desmanthus bicornutus S. Watson
CPI 90857; Grif 5549. Collected 1988 in St. Croix, Virgin Islands (U.S.).

The following were donated by Cindy Wildeus, University of Virgin Islands, Kingshill, St. Croix 008850, Virgin Islands (U.S.). Received 08/22/1989.

PI 638993. Desmanthus sp.
VI 7; Grif 5547. Collected 06/10/1988 in Venezuela. On autopista between Valencia and Caracas, km 100, at "Estacion Servicio Morocha Dos". Roadside and abandoned sites.

PI 638994. Desmanthus sp.
VI 14; Grif 5548. Collected 03/14/1988 in Dominican Republic. CENIP station, Matanza, Dominican Republic. Associated with Bothriochloa pertusa.

PI 638995. Desmanthus virgatus (L.) Willd.
VI 3; Grif 5552. Collected 05/1988 in Portuguesa, Venezuela. Soil pH 4-5, 1400-1600 mm rainfall.

PI 638996. Desmanthus virgatus (L.) Willd.
VI 4; Grif 5553. Collected 06/08/1988 in Venezuela. Las Majaguaz, Venezuela. Roadside, near irrigation canal.

PI 638997. Desmanthus virgatus (L.) Willd.
VI 5; Grif 5554. Collected 06/10/1988 in Venezuela. Tinaquillo, La Variante, Venezuela. Roadside.

PI 638998. Desmanthus virgatus (L.) Willd.
VI 6; Grif 5555. Collected 06/10/1988 in Cojedes, Venezuela. Apartaderos, Cojedes, Venezuela; roadside.

PI 638999. Desmanthus virgatus (L.) Willd.
VI 8; Grif 5556. Collected 06/10/1988 in Venezuela. On autopista between Valencia and Caracas, km 46; roadside.

PI 639000. Desmanthus virgatus (L.) Willd.
VI 10; Grif 5557. Collected 08/17/1987 in St. Croix, Virgin Islands (U.S.). Annaly, St. Croix. On highway 58 near junction with highway 765; roadside.

PI 639001. Desmanthus virgatus (L.) Willd.
VI 11; Grif 5558. Collected 03/14/1988 in Dominican Republic. On highway to San Cristobol, in Las Cajuilites, Dominican Republic; roadside.

PI 639002. Desmanthus virgatus (L.) Willd.
VI 12; Grif 5559. Collected 03/14/1988 in Dominican Republic. CESDA, San Cristobal, Dominican Republic. Associated with Panicum maximum near irrigation ditch. Possibly equivalent to CIAT 961.

PI 639003. Desmanthus virgatus (L.) Willd.
VI 13; Grif 5560. Collected 03/14/1988 in Venezuela. On highway, halfway between San Cristobol and Bani, between km 16 and 17. From grazed area at edge of sugar cane field near roadside.

PI 639004. Desmanthus virgatus (L.) Willd.
VI 15; Grif 5561. Collected 03/15/1988 in Venezuela. Two km from Boca Chica, in direction of San Pedro de Macoris, highway "Las Americas", Dominican Republic. Sixty m from sea. Sandy soil, lime base. Possibly equivalent to USDA PI 171962.

PI 639005. Desmanthus virgatus (L.) Willd.
VI 16; Grif 5562. Collected 03/15/1988 in Dominican Republic. Route 4, km 30, 3 km after San Pedro de Marcoris, towards Hato Mayor, Dominican Republic; roadside.

PI 639006. Desmanthus virgatus (L.) Willd.
VI 17; Grif 5563. Collected 03/15/1988 in Dominican Republic. Three km outside Seibo, on road to experiment station, Dominican Republic; roadside.

PI 639007. Desmanthus virgatus (L.) Willd.
VI 18; Grif 5564. Collected 03/15/1988 in Dominican Republic. Outside La Romana, on road from Alto de Chavon, Dominican Republic; roadside.

PI 639008. Desmanthus virgatus (L.) Willd.
VI 19; Grif 5565. Collected 03/15/1988 in Dominican Republic. Arroyo Hatillo, Route 1, Dominican Republic; roadside.

PI 639009. Desmanthus virgatus (L.) Willd.
VI 77; Grif 5566. Collected 1987 in Antigua, Antigua and Barbuda. Clarke's Hill, Antigua.

PI 639010. Desmanthus virgatus (L.) Willd.
VI 82; Grif 5567. Collected 06/10/1988 in Venezuela. On highway between Valencia and Caracas, km 20; roadside.

PI 639011. Desmanthus virgatus (L.) Willd.
VI 84; Grif 5568. Collected 06/07/1988 in Portuguesa, Venezuela. Campus of Universidad Ezequiel Zamora, Guanare, Portuguesa, Venezuela.

PI 639012. Desmanthus virgatus (L.) Willd.
VI 85; Grif 5569. Collected 06/08/1988 in Venezuela. Autopista "Jose Antonio Paez", between Guanare and Acarigua, km 30, Venezuela; roadside.

The following were donated by Cindy Wildeus, University of Virgin Islands, Kingshill, St. Croix 008850, Virgin Islands (U.S.); CSIRO, Division of Plant Industry, General Post Office Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Received 08/22/1989.

PI 639013. Desmanthus virgatus (L.) Willd.
CPI 67643; ILCA 20; Grif 5570. Collected 1988 in St. Croix, Virgin Islands (U.S.).

PI 639014. Desmanthus virgatus (L.) Willd.
CPI 92802; CF 495; Grif 5571. Collected 1988 in St. Croix, Virgin Islands (U.S.).

PI 639015. Desmanthus virgatus (L.) Willd.
ILCA 302; CPI 92803; CF 543; Grif 5572. Collected 1988 in St. Croix, Virgin Islands (U.S.).

The following were donated by Cindy Wildeus, University of Virgin Islands, Kingshill, St. Croix 008850, Virgin Islands (U.S.). Received 08/22/1989.

PI 639016. Desmanthus virgatus (L.) Willd.
VI 9; Grif 5574. Collected 03/30/1988 in St. Croix, Virgin Islands (U.S.). Estate Granard, St. Croix. Green panic (Panicum maximum) pastures planted in 1986.

PI 639017. Desmanthus virgatus (L.) Willd.
VI 76; Grif 5575. Collected 07/1987 in St. Croix, Virgin Islands (U.S.). Estate Diamond, St. Croix; roadside.

The following were donated by Cindy Wildeus, University of Virgin Islands, Kingshill, St. Croix 008850, Virgin Islands (U.S.); CSIRO, Division of Plant Industry, General Post Office Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Received 08/22/1989.

PI 639018. Desmanthus virgatus (L.) Willd.
CPI 79653; Grif 5576. Collected 1988 in St. Croix, Virgin Islands (U.S.).

The following were donated by Guoxuan Li, Washington State University, Department of Plant Pathology, Johnson Hall, Pullman, Washington 99164, United States. Received 12/13/1990.

PI 639019. Lablab purpureus (L.) Sweet
GL-4; W6 6350; Grif 12293. Collected in Xinjiang, China.

The following were collected by Albert E. Kretschmer, Jr., University of Florida, Indian River Research and Education Center, 2199 South Rock Road, Fort Pierce, Florida 31945-3138, United States. Received 08/11/1993.

PI 639020. Leucaena diversifolia (Schltdl.) Benth.
4329; Grif 1554. Collected 02/28/1985 in Oaxaca, Mexico. Latitude 17° 19' N. Longitude 96° 30' W. Elevation 1690 m. 12.3 km N of El Cerezel Rd. Oaxaca-Tuxtepec Hwy. 175 47.9 km N Oaxaca 190 and 175 Int. Abundant - insect damage.

PI 639021. Leucaena lanceolata S. Watson
4386; Grif 1556. Collected in Oaxaca, Mexico. Latitude 16° 1' N. Longitude 95° 39' W. Elevation 50 m. Astata 4.4 km E of Astata Hwy 200. First wetter area even though still dry.

PI 639022. Leucaena macrophylla Benth.
4381; Grif 1555. Collected 03/03/1985 in Oaxaca, Mexico. Latitude 15° 41' N. Longitude 96° 29' W. Elevation 100 m. 5.6 km S Int. Hwy 200 and Hwy 175 to Puerto Angel.

The following were donated by O.W. Norvell, Stanford University, Palo Alto, California, United States. Received 01/01/1989.

PI 639023. Macroptilium atropurpureum (DC.) Urb.
M835; W6 15706; Grif 12615.

The following were collected by O.W. Norvell, Stanford University, Palo Alto, California, United States. Received 01/01/1989.

PI 639024. Macroptilium atropurpureum (DC.) Urb.
Wild. M198; Grif 13971; W6 15589. Collected 1948 in Mexico.

PI 639025. Macroptilium gibbosifolium (Ortega) A. Delgado
Wild. M134; Grif 13973; W6 15586. Collected 1947 in Mexico.

Unknown source. Received 03/13/1990.

PI 639026. Macrotyloma uniflorum (Lam.) Verdc.
I-905b; Grif 1739. Collected in Nepal. Identifications by Dr. C. R. Gunn.

Unknown source. Received 02/15/1990.

PI 639027. Macrotyloma uniflorum (Lam.) Verdc.
I-905a; Grif 5517. Collected in Nepal. Seeds uniform, shiny, light brown. Some insect damage.

Unknown source. Received 02/15/1990.

PI 639028. Sesamum indicum L.
I-825; Grif 5501. Collected in Nepal. Seed color mixed, white, black, tan to brown.

Unknown source. Received 02/15/1990.

PI 639029. Sesamum indicum L.
2204; Grif 5502. Collected in Nepal. Seeds uniform, brown.

Unknown source. Received 02/15/1990.

PI 639030. Sesamum indicum L.
2214; Grif 5503. Collected in Nepal. Seed color mixed, black, white, tan to brown.

Unknown source. Received 02/15/1990.

PI 639031. Sesamum indicum L.
2252; Grif 5504. Collected in Nepal. Seeds black, tan or brown.

Unknown source. Received 02/15/1990.

PI 639032. Sesamum indicum L.
2342; Grif 5505. Collected in Nepal. Mixed colors; white, black, tan, brown.

The following were donated by Will Bonsall, Scatterseed Project, 39 Bailey Road, Industry, Maine 04938, United States. Received 06/08/2000.

PI 639033. Psophocarpus tetragonolobus (L.) DC.
Uncertain. Dumbala; Grif 14489. Collected 1999 in Sri Lanka. From South Ratnayake in Dambulla. Three-winged.

The following were donated by Hector Lozoya, Pictipapa, Conjunto Sedagro, Dom. conocido, Metepec, Mexico 52142, Mexico. Received 08/27/2004.

PI 639034. Solanum tuberosum L.
Breeding. A00389-31; Q 44215. Mexican late blight clone that originated from Aberdeen Idaho.

PI 639035. Solanum tuberosum L.
Breeding. A00499-08; Q 44217. Mexican late blight stock that originated from Aberdeen Idaho.

PI 639036. Solanum tuberosum L.
Breeding. A00502-12; Q 44219. Mexican late blight stock that originated from Aberdeen Idaho.

The following were developed by Linda M. Pollak, USDA, ARS, Iowa State University, Dept. of Agronomy, Ames, Iowa 50011, United States; M. M. Goodman, North Carolina State University, Crop Sciences, Statistics, Genetics, and Botany, Raleigh, North Carolina 27695-7620, United States; Marty Carson, USDA/ARS, North Carolina State University, Plant Pathology Department, Raleigh, North Carolina 27695-7616, United States; Randy Holley, Syngenta Seeds, 340 Southside Drive, Henderson, Kentucky 42420, United States; USDA, ARS, Germplasm Enhancement of Maize, Iowa State University, Ames, Iowa 50011, United States; Mike Blanco, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States; Peter Balint-Kurti, USDA-ARS, Department of Plant Pathology, Raleigh, North Carolina 27695-7616, United States. Donated by Linda M. Pollak, USDA, ARS, Iowa State University, Dept. of Agronomy, Ames, Iowa 50011, United States; M. M. Goodman, North Carolina State University, Crop Sciences, Statistics, Genetics, and Botany, Raleigh, North Carolina 27695-7620, United States; Marty Carson, USDA/ARS, North Carolina State University, Plant Pathology Department, Raleigh, North Carolina 27695-7616, United States; Susan Duvick, USDA, ARS, Germplasm Enhancement of Maize, Iowa State University, Ames, Iowa 50011, United States; USDA, ARS, Germplasm Enhancement of Maize, Iowa State University, Ames, Iowa 50011, United States; Jim Holland, USDA-ARS, North Carolina State University, Department of Crop Science, Raleigh, North Carolina 27695-7620, United States; Michael Clements, USDA, ARS, Corn Host Plant Resistance Research Unit, Dorman Hall, Room 325, Mississippi State, Mississippi 39762, United States; Mark J. Millard, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 01/02/2002.

PI 639037. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2084-02_DK212T_S11_F2S4_9151-Blk38/00; GEMS-0004; 1806; Ames 26508. GP-407. Pedigree - (DK212T x S11)-1-1. Brazilian hybrid DK212T crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight, Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to non-stiff stalk testers compared to elite hybrid checks. It produces yellow kernels, semident in texture with particularly high protein composition.

PI 639038. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2086-01_DK212T_S11_F2S4_9154-Blk20/00; GEMS-0005; 1811; Ames 26509. GP-408. Pedigree - (DK212T x S11)-1-1. Brazilian hybrid DK212T crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight, Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to non-stiff stalk testers compared to elite hybrid checks. It produces yellow seeds, semident in texture.

PI 639039. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2088-01_DK212T_S11_F2S4_9157-Blk29/00; GEMS-0006; 1816; Ames 26510. GP-409. Pedigree - (DK212T x S11)-1-1-1-1. Brazilian hybrid DK212T crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight, Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to non-stiff stalk testers compared to elite hybrid checks. It has orange

to yellow seeds and a semident to semiflint texture and shows common rust resistance.

PI 639040. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2111-01_DK212T_S11_F2S4_9166-Blk31/00; GEMS-0009; 1831; Ames 26513. GP-410. Pedigree - (DK212T x S11)-1-1. Brazilian hybrid DK212T crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight, Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to non-stiff stalk testers compared to elite hybrid checks. It yielded relatively well in topcrosses in the Midwest compared to other released GEM germplasm of a similar derivation. It flowers at approximately the same time as B73 in the southern US and shows common rust resistance. It has yellow kernels, semiflint to semident in texture.

PI 639041. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2112-02_DK212T_S11_F2S4_9169-Blk20/00; GEMS-0010; 1836; Ames 26514. GP-411. Pedigree - (DK212T x S11)-1-1. Brazilian hybrid DK212T crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight, Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to non-stiff stalk testers compared to elite hybrid checks. It flowers at approximately the same time as B73 and has orange kernels with a semiflint to semident texture.

PI 639042. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2116-02_DK212T_S11_F2S4_9172-Blk28/00; GEMS-0011; 1841; Ames 26515. GP-412. Pedigree - (DK212T x S11)-1-1. Brazilian hybrid DK212T crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight,

Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to non-stiff stalk testers compared to elite hybrid checks. It has yellow kernels with a semiflint to semident texture.

PI 639043. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2120-01_DK888_S11_F2S4_9175-Blk28/00; GEMS-0012; 1846; Ames 26516. GP-413. Pedigree - (DK888 x S11)-1-1. Thai hybrid DK888 crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight, Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields extremely well in the southern US in topcrosses to non-stiff stalk testers compared to elite hybrid checks. It produces orange kernels of a semident texture.

PI 639044. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2121-04_DK888_S11_F2S4_9178-Blk29/00; GEMS-0013; 1851; Ames 26517. GP-414. Pedigree - (DK888 x S11)-1-1. Thai hybrid DK888 crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight, Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to non-stiff stalk testers compared to elite hybrid checks. It produces orange kernels of a semiflint to semident texture.

PI 639045. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2131-01_DK888_S11_F2S4_9184-Blk20/00; GEMS-0015; 1861; Ames 26519. GP-415. Pedigree - (DK888 x S11)-1-1. Thai hybrid DK888 crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight,

Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to non-stiff stalk testers compared to elite hybrid checks. It has good gray leaf spot resistance in topcrosses and has yellow kernels, semident in texture.

PI 639046. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2142-01_DK888_S11_F2S4_9190-Blk19/00; GEMS-0017; 1871; Ames 26521. GP-416. Pedigree - (DK888 x S11)-1-1. Thai hybrid DK888 crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight, Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to non-stiff stalk testers compared to elite hybrid checks. It has yellow kernels, semiflint to semident in texture.

PI 639047. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2143-02_DK888_S11_F2S4_9193-Blk19/00; GEMS-0018; 1876; Ames 26522. GP-417. Pedigree - (DK888 x S11)-1-1-1-1. Thai hybrid DK888 crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight, Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to non-stiff stalk testers compared to elite hybrid checks. It also yielded relatively well in topcrosses in the Midwest compared to other released GEM germplasm of a similar derivation. It flowers at approximately the same time as B73 in the southern US. It has common rust and gray leaf spot resistance and produces orange kernels, semident in texture.

PI 639048. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2146-01_DK888_S11_F2S4_9196-Blk29/00; GEMS-0019; 1881; Ames 26523. GP-418. Pedigree - (DK888 x S11)-1-1. Thai hybrid DK888 crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in

Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight, Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to non-stiff stalk testers compared to elite hybrid checks. It has good per se gray leaf spot resistance. It produces yellow kernels, semiflint in texture with a high oil content.

PI 639049. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2150-01_DK888_S11_F2S4_9199-Blk16/00; GEMS-0020; 1886; Ames 26524. GP-419. Pedigree - (DK888 x S11)-1-1. Thai hybrid DK888 crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight, Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to non-stiff stalk testers compared to elite hybrid checks. It has good gray leaf spot resistance, both in top-crosses and per se. It produces orange and yellow kernels with a semident texture and a high protein content.

PI 639050. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2152-02_DK888_S11_F2S4_65/97_Bulk/97-99; GEMS-0021 ; 2152-02_DK888_S11_F2S4_9202-Blk24/00; 9202; 1891; Ames 26497. GP-420. Pedigree - (DK888 xS11)-1-1-1-1. Thai hybrid DK888 crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight, Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to non-stiff stalk testers compared to elite hybrid checks. It flowers at approximately the same time as B73 in the southern US. It is relatively resistant to Fusarium ear rot and to the accumulation of fumonosin. It produces yellow seed, semident in texture.

PI 639051. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2156-02_DK888_S11_F2S4_H92847-Blk13/00; GEMS-0023; 1901; Ames 26526. GP-421. Pedigree - (DK888 x S11)-1-1. Thai hybrid DK888 crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight, Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to non-stiff stalk testers compared to elite hybrid checks. It produces yellow kernels, semiflnt in texture.

PI 639052. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2201-01_DKB830_S11_F2S4_9208-Blk27/00; GEMS-0024; 1906; Ames 26527. GP-422. Pedigree - (DK888 x S11)-1-1. Mexican hybrid DKB830 crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight, Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to non-stiff stalk testers compared to elite hybrid checks. It has relatively good per se gray leaf spot resistance. It produces yellow and white kernels, semident in texture.

PI 639053. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2250-02_XL370A_S11_F2S4_3363-Blk03/00; GEMS-0028; 1926; 2250-02_XL370A_S11_F2S4_9217-Blk21/00; H92857; Ames 26530. GP-423. Pedigree - (DKXL370A x S11)-1-1. Brazilian hybrid DKXL370A crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight, Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to non-stiff stalk testers compared to elite hybrid checks. It showed good per se resistance to

Aspergillus ear rot and to aflatoxin accumulation. It produces yellow kernels, semident in texture.

PI 639054. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2253-01_XL370A_S11_F2S4_9220-Blk24/00; GEMS-0029; 1931; Ames 26531. GP-424. Pedigree - (DKXL370A x S11)-1-1. Brazilian hybrid DKXL370A crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight, Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to non-stiff stalk testers compared to elite hybrid checks. It flowers with a few days of B73 in the Midwest. It produces yellow kernels, semident in texture.

The following were developed by Linda M. Pollak, USDA, ARS, Iowa State University, Dept. of Agronomy, Ames, Iowa 50011, United States; M. M. Goodman, North Carolina State University, Crop Sciences, Statistics, Genetics, and Botany, Raleigh, North Carolina 27695-7620, United States; Marty Carson, USDA/ARS, North Carolina State University, Plant Pathology Department, Raleigh, North Carolina 27695-7616, United States; USDA, ARS, Germplasm Enhancement of Maize, Iowa State University, Ames, Iowa 50011, United States; Peter Balint-Kurti, USDA-ARS, Department of Plant Pathology, Raleigh, North Carolina 27695-7616, United States. Donated by Linda M. Pollak, USDA, ARS, Iowa State University, Dept. of Agronomy, Ames, Iowa 50011, United States; M. M. Goodman, North Carolina State University, Crop Sciences, Statistics, Genetics, and Botany, Raleigh, North Carolina 27695-7620, United States; Marty Carson, USDA/ARS, North Carolina State University, Plant Pathology Department, Raleigh, North Carolina 27695-7616, United States; USDA, ARS, Germplasm Enhancement of Maize, Iowa State University, Ames, Iowa 50011, United States. Received 01/02/2002.

PI 639055. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2258-03_XL380_S11_F2S4_71/97_Bulk/98; GEMS-0030; 9223; Ames 26504. GP-425. Pedigree - (DKXL380xS11)-1-1. Brazilian hybrid DKXL380 crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight, Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to

non-stiff stalk testers compared to elite hybrid checks. It showed good per se resistance to Aspergillus ear rot and to aflatoxin accumulation. It produces yellow kernels, semiflint to semident in texture.

The following were developed by Linda M. Pollak, USDA, ARS, Iowa State University, Dept. of Agronomy, Ames, Iowa 50011, United States; M. M. Goodman, North Carolina State University, Crop Sciences, Statistics, Genetics, and Botany, Raleigh, North Carolina 27695-7620, United States; Marty Carson, USDA/ARS, North Carolina State University, Plant Pathology Department, Raleigh, North Carolina 27695-7616, United States; Randy Holley, Syngenta Seeds, 340 Southside Drive, Henderson, Kentucky 42420, United States ; USDA, ARS, Germplasm Enhancement of Maize, Iowa State University, Ames, Iowa 50011, United States; Mike Blanco, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States; Peter Balint-Kurti, USDA-ARS, Department of Plant Pathology, Raleigh, North Carolina 27695-7616, United States. Donated by Linda M. Pollak, USDA, ARS, Iowa State University, Dept. of Agronomy, Ames, Iowa 50011, United States; M. M. Goodman, North Carolina State University, Crop Sciences, Statistics, Genetics, and Botany, Raleigh, North Carolina 27695-7620, United States; Marty Carson, USDA/ARS, North Carolina State University, Plant Pathology Department, Raleigh, North Carolina 27695-7616, United States; Susan Duvick, USDA, ARS, Germplasm Enhancement of Maize, Iowa State University, Ames, Iowa 50011, United States; USDA, ARS, Germplasm Enhancement of Maize, Iowa State University, Ames, Iowa 50011, United States; Jim Holland, USDA-ARS, North Carolina State University, Department of Crop Science, Raleigh, North Carolina 27695-7620, United States; Michael Clements, USDA, ARS, Corn Host Plant Resistance Research Unit, Dorman Hall, Room 325, Mississippi State, Mississippi 39762, United States; Mark J. Millard, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 01/02/2002.

PI 639056. Zea mays L. **subsp. mays**
Breeding. Partinbred. 2282-01_XL380_S11_F2S4_9226-Blk26/00; GEMS-0031; 1941; Ames 26533. GP-426. Pedigree - (DKXL380 x S11)-1-1. Brazilian hybrid DKXL380 crossed to proprietary stiff stalk line from GEM "company 11". Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing/selection season in Homestead, FL (F2S1), and a third selfing/selection season in a selection nursery in Raleigh (F2S2). All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to a mixture of foliar diseases (Southern and Northern Leaf Blight, Anthracnose, Gray Leaf Spot), resistance to Fusarium ear rot, resistance to Anthracnose stalk rot, resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to non-stiff stalk testers compared to elite hybrid checks. It produces orange kernels, semident in texture.

The following were developed by Hans-Henning Muendel, Agriculture Canada, Lethbridge Research Station, Crop Sciences Section, Research Station, Lethbridge, Alberta T1J 4B1, Canada; F. Kiehn, Agriculture and Agri-Food Canada, Research Centre, Unit 100 - 101 Route 100, Morden, Manitoba R6M 1Y5, Canada; H.C. Huang, Agriculture and Agri-Food Canada, Lethbridge Research

Center, P.O. Box 3000, Lethbridge, Alberta T1J 4B1, Canada; Robert L. Conner, Agriculture and Agri-Food Canada, Morden Research Station, Unit 100-101, Morton, Manitoba R6M 1Y5, Canada; G. Saindon, Agriculture and Agri-Food Canada, Southern Crop Protection and Fod Reserch Centre, 1391 Sandford Street, London, Ontario N5V 4T3, Canada. Received 04/04/2005.

PI 639057. Phaseolus vulgaris L.
Cultivar. Pureline. "Resolute". CV-248. Pedigree - `83B352'/5/'GN STAR'*2/ 3/'REDKLOUD'/'KENTWOOD'/ 2/'SWAN VALLEY'/ 4/'GN STAR'*2 /3/'REDKLOUD'/'KENTWOOD'/ 2/'SWAN VALLEY'/ 6/'SASK 92070'. An early-maturing upright great northern bean, developed at the AAFC Research Centre, Lethbridge, Alberta in collaboration with the AAFC Research Station, Morden, Manitoba. Is resistant to both yellow and orange strains of the bacterial wilt pathogen, and is particularly well adapted to narrow row production.

The following were developed by Robert E. Allan, USDA-ARS, Dept. of Crop & Soil Science, 209 Johnson Hall, Pullman, Washington 99164, United States. Received 03/17/2005.

PI 639058. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 386; 02CF 49. Pedigree - Daws 2 * / Triple Dirk VRN 1 // 5 * Daws, 99CF 386. BC6 F5:8 near-isoline (NIL) of Daws having VRN 1 allele for spring growth habit derived from Triple Dirk VRN 1 NIL. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., test wt., % stand, kernel hardness, % protein, sedimentation; NIL yields 15% > Daws and kernel wt. of NIL < Daws (< 7mg). From spring planting NIL has similar grain yall-sown yield. NIL has reduced plant ht. (<13%) and test wt. (<25 g/L) vs fall-sown values. Compared to spring check cv. Alpowa, NIL has higher (>23%) grain yield and heads 6 d later.

PI 639059. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 389; 02CF 50. Pedigree - Daws 2 * / Triple Dirk VRN 1 // 5 * Daws, 99CF 389. BC6 F5:8 near-isoline (NIL) of Daws having VRN 1 allele for spring growth habit derived from Triple Dirk VRN 1 NIL. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., grain yield, % stand, kernel hardness, kernel weight, % protein, sedimentation value; NIL < Daws for test wt. (< 32g/L). From spring planting NIL has similar grain yieltest wt. values to fall-sown values. Spring-sown plant ht 21% < fall-sown value. Compared to spring check cv Alpowa NIL heads 7d later and has comparable grain yield.

PI 639060. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 397; 02CF 51. Pedigree - Daws 2 * / Triple Dirk VRN 1 // 5 * Daws, 99CF 397. BC6 F5:8 near-isoline (NIL) of Daws having VRN 1 allele for spring growth habit derived from Triple Dirk VRN 1 NIL. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., grain yield, % stand, kernel hardness, kernel weight, % protein, sedimentation value; NIL < Daws for test wt. (< 35g/L). From spring planting NIL has similar grain yieltest wt. to its fall-sown values. Spring-sown plant

ht was 10% < fall-sown ht. Compared to spring check cv Alpowa NIL heads 6d later and has comparable grain yield.

PI 639061. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 399; 02CF 52. Pedigree - Daws 2 * / Triple Dirk VRN 1 // 5 * Daws, 99CF 399. BC6 F5:8 near-isoline (NIL) of Daws having VRN 1 allele for spring growth habit derived from Triple Dirk VRN 1 NIL. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., grain yield, % stand, kernel hardness, kernel weight, % protein, sedimentation value; NIL test wt. < Daws (<34g/L). From spring planting NIL has similar grain yield and t. to its fall-sown values. Spring-sown plant ht was 20% < fall-sown ht. Compared to spring check cv Alpowa NIL heads 8d later and has comparable grain yield.

PI 639062. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 405; 02CF 53. Pedigree - Daws 2 * / Triple Dirk VRN 1 // 5 * Daws, 99CF 405. BC6 F5:8 near-isoline (NIL) of Daws having VRN 1 allele for spring growth habit derived from Triple Dirk VRN 1 NIL. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., test wt., % stand, kernel hardness, kernel weight, % protein, sedimentation value; NIL has grain yield > Daws (>11%). From spring planting NIL values were less than fallvalues for plant ht. (< 20%), grain yield (<23%) and test wt. (<20g/L). Compared to spring check cv Alpowa NIL heads 8d later and has comparable grain yield.

PI 639063. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 390; 02CF 55. Pedigree - Daws 2 * / Triple Dirk Vrn 1 // 5 * Daws, 99CF 390. BC6 F5:8 near-isoline (NIL) of Daws having vrn 1 allele for winter habit derived from Daws. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., test wt., kernel hardness, kernel weight, % protein, and sedimentation value; NIL > Daws for grain yield (>15%) and % stand (>25%).

PI 639064. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 394; 02CF 56. Pedigree - Daws 2 * / Triple Dirk Vrn 1 // 5 * Daws, 99CF 394. BC6 F5:8 near-isoline (NIL) of Daws having vrn 1 allele for winter habit derived from Daws. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., grain yield, % stand, kernel hardness, % protein, and sedimentation value; NIL > Daws for test wt. (>20g/L) and kernel wt. (>8mg).

PI 639065. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 400; 02CF 57. Pedigree - Daws 2 * / Triple Dirk Vrn 1 // 5 * Daws, 99CF 400. BC6 F5:8 near-isoline (NIL) of Daws having vrn 1 allele for winter habit derived from Daws. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., grain yield, test wt.,

kernel hardness, % protein, and sedimentation value; NIL > Daws for % stand (>25%) and kernel wt. (>6mg).

PI 639066. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 403; 02CF 58. Pedigree - Daws 2 * / Triple Dirk Vrn 1 // 5 * Daws, 99CF 403. BC6 F5:8 near-isoline (NIL) of Daws having vrn 1 allele for winter habit derived from Daws. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., test wt., kernel wt., % protein, sedimentation value, kernel hardness, % stand. NIL > Daws for grain yield (>11%).

PI 639067. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 407; 02CF 59. Pedigree - Daws 2 * / Triple Dirk Vrn 1 // 5 * Daws, 99CF 407. BC6 F5:8 near-isoline (NIL) of Daws having vrn 1 allele for winter habit derived from Daws. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., test wt., kernel wt., % protein, sedimentation value. NIL > Daws for grain yield (>11%), % stand (>25%), and kernel hardness (35 vs. 29).

PI 639068. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 411; 02CF 61. Pedigree - Daws 2 * / Triple Dirk VRN 2 // 5 * Daws, 99CF 411. BC6 F5:8 near-isoline (NIL) of Daws having VRN 2 allele for spring growth habit derived from Triple Dirk VRN 2 NIL. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., test wt., kernel hardness, kernel wt., % protein, sedimentation value. NIL > Daws for grain yield (>21%), % stand (>25%). From spring planting spring sown values &n values for plant ht. (<35%) and grain yield (<61%); values were similar for test wt. Compared to spring check cv. Alpowa, NIL heads 14 d later and has lower grain yield (<47%).

PI 639069. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 412; 02CF 62. Pedigree - Daws 2 * / Triple Dirk VRN 2 // 5 * Daws, 99CF 412. BC6 F5:8 near-isoline (NIL) of Daws having VRN 2 allele for spring growth habit derived from Triple Dirk VRN 2 NIL. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., kernel hardness, % protein, sedimentation value. NIL < Daws for test wt. (<24g/L), and kernel wt. (<5mg). NIL > Daws for grain yield (>18%) and % stand (> planting spring sown values < fall-sown values for plant ht. (<36%) and grain yield (<60%); values were similar for test wt. Compared to spring check cv. Alpowa, NIL heads 16 d later and yields less (<47%).

PI 639070. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 419; 02CF 63. Pedigree - Daws 2 * / Triple Dirk VRN 2 // 5 * Daws, 99CF 419. BC6 F5:8 near-isoline (NIL) of Daws having VRN 2 allele for spring growth habit derived from Triple Dirk VRN 2 NIL. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. >From fall-planting NIL is similar to Daws for heading date, grain yield, test wt., % stand, kernel hardness, kernel wt., % protein,

sedimentation value. NIL has plant ht. > Daws (<14%). From spring planting values < fall-sown valt ht. (<35%) and grain yield (<37%); but similar for test wt. Compared to spring check cv. Alpowa, NIL heads 14 d later and yields less (<27%).

PI 639071. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 427; 02CF 64. Pedigree - Daws 2 * / Triple Dirk VRN 2 // 5 * Daws, 99CF 427. BC6 F5:8 near-isoline (NIL) of Daws having VRN 2 allele for spring growth habit derived from Triple Dirk VRN 2 NIL. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, test wt., kernel hardness, % protein, sedimentation value. NIL > Daws for plant ht. (<12%), grain yield (>19%), kernel wt. (>11mg). NIL < Daws for % stand (<17%).ting values < fall-sown values for plant ht. (<24%) and grain yield (<38%); test wts. were similar. Compared to spring check cv. Alpowa, NIL heads 11 d later and yields less (<17%).

PI 639072. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 433; 02CF 65. Pedigree - Daws 2 * / Triple Dirk VRN 2 // 5 * Daws, 99CF 433. BC6 F5:8 near-isoline (NIL) of Daws having VRN 2 allele for spring growth habit derived from Triple Dirk VRN 2 NIL. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for test wt., % stand, kernel hardness, kernel wt., % protein, sedimentation value. NIL > Daws for plant ht. (>12%), grain yield (>20%). Heads 3 d earlier than Daws. From spring planting vall-sown values for plant ht. (<26%) and grain yield (<38%) but comparable for test wt. NIL heads 10 d later than spring check cv. Alpowa and yields 17% <less than Alpowa.

PI 639073. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 415; 02CF 67. Pedigree - Daws 2 * / Triple Dirk Vrn 2 // 5 * Daws, 99CF 415. BC6 F5:8 near-isoline (NIL) of Daws having vrn 2 allele for winter habit derived from Daws. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., grain yield, kernel hardness, % protein, sedimentation value. NIL < Daws for test wt. (<30g/L), % stand (<24%), and kernel wt. (<9mg).

PI 639074. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 417; 02CF 68. Pedigree - Daws 2 * / Triple Dirk Vrn 2 // 5 * Daws, 99CF 417. BC6 F5:8 near-isoline (NIL) of Daws having vrn 2 allele for winter habit derived from Daws. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., grain yield, % stand, kernel hardness, kernel wt., % protein, sedimentation value. NIL < Daws for test wt. (<37g/L).

PI 639075. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 425; 02CF 69. Pedigree - Daws 2 * / Triple Dirk Vrn 2 // 5 * Daws, 99CF 425. BC6 F5:8 near-isoline (NIL) of Daws having vrn 2 allele for winter habit derived from Daws. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is

similar to Daws for heading date, plant ht., % stand, kernel hardness, % protein, sedimentation value. NIL < Daws for grain yield (<12%), test wt. (<41g/L) and kernel wt. (<9mg).

PI 639076. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 431; 02CF 70. Pedigree - Daws 2 * / Triple Dirk Vrn 2 // 5 * Daws, 99CF 431. BC6 F5:8 near-isoline (NIL) of Daws having vrn 2 allele for winter habit derived from Daws. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, grain yield, % stand, kernel hardness, kernel wt., % protein, sedimentation value. NIL < Daws for test wt. (<24g/L) and > Daws for plant ht. (>10%).

PI 639077. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 438. Pedigree - Daws 2 * / Triple Dirk Vrn 2 // 5 * Daws, 99CF 438. BC6 F5:8 near-isoline (NIL) of Daws having vrn 2 allele for winter habit derived from Daws. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., test wt., % stand, kernel hardness, kernel wt., % protein, sedimentation value. NIL > Daws for grain yield (>12%).

PI 639078. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 443; 02CF 73. Pedigree - Daws 2 * / Triple Dirk VRN 3 // 5 * Daws, 99CF 443. BC6 F5:8 near-isoline (NIL) of Daws having VRN 3 allele for spring growth habit derived from Triple Dirk VRN 3 NIL. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for grain yield, test wt., kernel hardness, sedimentation value. NIL heads 5 d earlier than Daws and is > Daws for plant ht. (>10%), % stand (>25%), % protein (13.6 vs. 12.3). NIL < Daws fo (<5mg). >From spring planting values were < fall-sown values for plant ht. (<22%), grain yield (<13%) but comparable for test wt. NIL heads 8 d later than spring check cv. Alpowa; similar to Alpowa for grain yield.

PI 639079. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 449; 02CF 74. Pedigree - Daws 2 * / Triple Dirk VRN 3 // 5 * Daws, 99CF 449. BC6 F5:8 near-isoline (NIL) of Daws having VRN 3 allele for spring growth habit derived from Triple Dirk VRN 3 NIL. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, grain yield, test wt., % stand, kernel hardness, kernel wt., % protein, sedimentation value. NIL > Daws for plant ht. (>18%). >From spring planting values were < fall-sown lant ht. (<29%), grain yield (<30%) but comparable for test wt. NIL heads 11 d later than spring check cv. Alpowa and yields less (<16%).

PI 639080. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 457; 02CF 75. Pedigree - Daws 2 * / Triple Dirk VRN 3 // 5 * Daws, 99CF 457. BC6 F5:8 near-isoline (NIL) of Daws having VRN 3 allele for spring growth habit derived from Triple Dirk VRN 3 NIL. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From

fall-planting NIL is similar to Daws for heading date, test wt., % stand, kernel hardness, kernel wt., % protein, sedimentation value. NIL > Daws for plant ht. (>10%), grain yield (>23%). >From spring planting values were < s for plant ht. (<25%), grain yield (<30%), test wt. (<31g/L). NIL heads 8 d later than spring check cv. Alpowa and equal to Alpowa for grain yield.

PI 639081. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 459; 02CF 76. Pedigree - Daws 2 * / Triple Dirk VRN 3 // 5 * Daws, 99CF 459. BC6 F5:8 near-isoline (NIL) of Daws having VRN 3 allele for spring growth habit derived from Triple Dirk VRN 3 NIL. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., grain yield, % stand, kernel hardness, kernel wt., % protein, sedimentation value. NIL < Daws for test wt., (<19g/L). From spring planting values were < fall-sown v plant ht. (<25%), grain yield (<34%) but test wts. were comparable. NIL heads 10 d later than spring check cv. Alpowa and yields less (<22%).

PI 639082. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 465; 02CF 76. Pedigree - Daws 2 * / Triple Dirk VRN 3 // 5 * Daws, 99CF 465. BC6 F5:8 near-isoline (NIL) of Daws having VRN 3 allele for spring growth habit derived from Triple Dirk VRN 3 NIL. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, grain yield, test wt., % stand, kernel hardness, kernel wt., % protein, sedimentation value. Plant ht. of NIL > Daws (>13%). >From spring planting values were < fall-sown vant ht. (<23%), grain yield (<18%), test wt. (<31g/L). NIL heads 9 d later than spring check cv. Alpowa and comparable to Alpowa for grain yield.

PI 639083. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 448; 02CF 79. Pedigree - Daws 2 * / Triple Dirk Vrn 3 // 5 * Daws, 99CF 448. BC6 F5:8 near-isoline (NIL) of Daws having vrn 3 allele for winter habit derived from Daws. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, grain yield, test wt., % stand, kernel hardness, kernel wt., % protein, sedimentation value. NIL > Daws for plant ht. (>16%).

PI 639084. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 455; 02CF 80. Pedigree - Daws 2 * / Triple Dirk Vrn 3 // 5 * Daws, 99CF 455. BC6 F5:8 near-isoline (NIL) of Daws having vrn 3 allele for winter habit derived from Daws. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, grain yield, kernel hardness, kernel wt., % protein, sedimentation value. NIL > Daws for plant ht. (>10%) and % stand (>18%). NIL < Daws for test wt. (<20g/L).

PI 639085. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 460; 02CF 81. Pedigree - Daws 2 * / Triple Dirk Vrn 3 // 5 * Daws, 99CF 460. BC6 F5:8 near-isoline (NIL) of Daws having vrn 3 allele for winter habit derived from Daws. Daws is a common soft

white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., % stand, grain hardness, kernel wt., % protein, sedimentation value. NIL > Daws for grain yield (>11%). NIL < Daws for test wt. (<29g/L).

PI 639086. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 462; 02CF 82. Pedigree - Daws 2 * / Triple Dirk Vrn 3 // 5 * Daws, 99CF 462. BC6 F5:8 near-isoline (NIL) of Daws having vrn 3 allele for winter habit derived from Daws. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for % stand, kernel hardness, kernel wt., % protein, sedimentation value. NIL heads 4 d earlier than Daws, has taller plant ht. (>12%) and higher grain yield (>14%). NIL < Daws for test wt. (<22g/L).

PI 639087. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 468; 02CF 83. Pedigree - Daws 2 * / Triple Dirk Vrn 3 // 5 * Daws, 99CF 468. BC6 F5:8 near-isoline (NIL) of Daws having vrn 3 allele for winter habit derived from Daws. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., test wt., % stand, kernel hardness, kernel wt., % protein, sedimentation value. NIL has higher grain yield than Daws (>16%).

PI 639088. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 470; 02CF 85. Pedigree - Daws 2 * / Triple Dirk VRN 4 // 5 * Daws, 99CF 470. BC6 F5:8 near-isoline (NIL) of Daws having VRN 4 allele for spring growth habit derived from Triple Dirk VRN 4 NIL. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, grain yield, % stand, kernel hardness, kernel wt., % protein, sedimentation value. NIL has plant ht 8% > Daws and test wt. 39g/L < Daws. From spring planting values were < faalues for plant ht. (<24%), grain yield (<38%), test wt. (<22g/L). NIL heads 14 d later than spring check cv. Alpowa and yields 26% < Alpowa.

PI 639089. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 472; 02CF 86. Pedigree - Daws 2 * / Triple Dirk VRN 4 // 5 * Daws, 99CF 472. BC6 F5:8 near-isoline (NIL) of Daws having VRN 4 allele for spring growth habit derived from Triple Dirk VRN 4 NIL. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, grain yield, % stand, kernel hardness, kernel wt., % protein, sedimentation value. NIL < Daws for plant ht. (<8%) and test wt. (<22g/L). From spring planting values were <alues for plant ht. (<21%), grain yield (<52%), test wt. (<39g/L). NIL heads 18 d later than spring check cv. Alpowa and yields 49% < Alpowa.

PI 639090. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 473; 02CF 87. Pedigree - Daws 2 * / Triple Dirk VRN 4 // 5 * Daws, 99CF 473. BC6 F5:8 near-isoline (NIL) of Daws having VRN 4 allele for spring growth habit derived from Triple Dirk VRN 4 NIL.

Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, grain yield, % stand, kernel hardness, kernel wt., % protein, sedimentation value. NIL < Daws for plant ht. (<9%) and test wt. (<27g/L). From spring planting values were <alues for plant ht. (<14%), grain yield (<44%), test wt. (<29g/L). NIL heads 18 d later than spring check cv. Alpowa and yields 39% < Alpowa.

PI 639091. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 484; 02CF 88. Pedigree - Daws 2 * / Triple Dirk VRN 4 // 5 * Daws, 99CF 484. BC6 F5:8 near-isoline (NIL) of Daws having VRN 4 allele for spring growth habit derived from Triple Dirk VRN 4 NIL. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., grain yield, test wt., % stand, kernel hardness, kernel wt., % protein, sedimentation value. From spring planting values were < fall-sown values for plant ht. (<32%), yield (<66%), test wt. (<31g/L). NIL heads 19 d later than spring check cv. Alpowa and yields 60% <Alpowa.

PI 639092. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 485; 02CF 89. Pedigree - Daws 2 * / Triple Dirk VRN 4 // 5 * Daws, 99CF 485. BC6 F5:8 near-isoline (NIL) of Daws having VRN 4 allele for spring growth habit derived from Triple Dirk VRN 4 NIL. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., grain yield, test wt., kernel hardness, % protein, sedimentation value. NIL has % stand 18% > Daws and 7 mg. > Daws for kernel wt. From spring planting values are <n values for plant ht. (<22%), grain yield (<29%), test wt. (<46g/L). NIL heads 15 d later than spring check cv. Alpowa and yields 22% < Alpowa.

PI 639093. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 471; 02CF 91. Pedigree - Daws 2 * / Triple Dirk Vrn 4 // 5 * Daws, 99CF 471. BC6 F5:8 near-isoline (NIL) of Daws having vrn 4 allele for winter habit derived from Daws. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, grain yield, test wt., % stand, kernel hardness, kernel wt., % protein, sedimentation value. NIL taller than Daws (>12%).

PI 639094. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 475; 02CF 92. Pedigree - Daws 2 * / Triple Dirk Vrn 4 // 5 * Daws, 99CF 475. BC6 F5:8 near-isoline (NIL) of Daws having vrn 4 allele for winter habit derived from Daws. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for plant ht., grain yield, test wt., % stand, kernel hardness, kernel wt., % protein, sedimentation value. NIL heads 3 d earlier than Daws.

PI 639095. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 477; 02CF 93. Pedigree - Daws 2 * / Triple Dirk Vrn 4 // 5 * Daws, 99CF 477. BC6 F5:8 near-isoline (NIL) of Daws having

vrn 4 allele for winter habit derived from Daws. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., grain yield, test wt., % stand, kernel hardness, kernel wt., % protein, sedimentation value.

PI 639096. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 488; 02CF 94. Pedigree - Daws 2 * / Triple Dirk Vrn 4 // 5 * Daws, 99CF 488. BC6 F5:8 near-isoline (NIL) of Daws having vrn 4 allele for winter habit derived from Daws. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for heading date, plant ht., grain yield, test wt., % stand, kernel hardness, kernel wt., % protein, sedimentation value.

PI 639097. Triticum aestivum L. **subsp. aestivum**
Genetic. Pureline. 99CF 489; 02CF 95. Pedigree - Daws 2 * / Triple Dirk Vrn 4 // 5 * Daws, 99CF 489. BC6 F5:8 near-isoline (NIL) of Daws having vrn 4 allele for winter habit derived from Daws. Daws is a common soft white winter bearded white chaff semidwarf (Rht2) cv with large kernels (42mg). NIL phenotypically similar to Daws. From fall-planting NIL is similar to Daws for plant ht., test wt., % stand, kernel hardness, kernel wt., % protein, sedimentation value. NIL < Daws for grain yield (<16%) and sedimentation value (7.2 vs 11.7); NIL heads 4 d earlier than Daws.

The following were developed by Mathias F. Kolding, 1910 SW 44, Pendleton, Oregon 97801, United States. Received 04/18/2005.

PI 639098. X Triticosecale sp.
Breeding. Pureline. KT941276pb003; NSGC 9511. Pedigree - LT371.90/5/Badia/3/63189/Cama/2/FW72001/Moro/4/UT132712. Tall, stiff hollow culms, neck pubescent, winter hardy, mid-late maturity. Spike; clavate, lax, long, awned, nodding. Rachilla; pubescent. Glume; white, short pubescent edges, slight pubescence surface, long, narrow, shoulder narrow. Beak; narrow, acuminate, short. Awn; white, to 4 cm towards distal end of spike, tend to dehice. Kernel; brown, soft, long, elliptical, dorsal surface wrinkled. Brush; medium, short. Germ; medium. Crease; mid-wide, mid-deep. Cheeks; rounded. Excellent general disease resistance, except Fusarium Head Blight and Cephalosporum Stripe. Feed type. Good gross forage production, excellent crude forage protein yields.

PI 639099. X Triticosecale sp.
Breeding. Pureline. KT941256h003; NSGC 9512. Pedigree - LT371.90/5/Badia/3/63189/Cama/2/FW72001/Moro/4/UT132712. Dark green foliage, erect plants, mid-tall, stiff, hollow culms, neck glabrous, winter, hardy, mid-late maturity, collar slight vee. Spike; oblong, lax, long, awned, nodding. Rachilla; pubescent. Glume; white, long, pubescent, mid-wide. Shoulder; square. Beak; narrow, acuminate. Awn; white, to 8 cm, tend to persist. Kernel; brown, soft, long, elliptical, dorsal surface wrinkled. Brush; small, short. Germ; small. Crease; narrow, deep. Cheeks; rounded. Good-plus leaf to stem ratio for forage. Good grain potential. Excellent general disease resistance, except Fusarium Head Blight and Cephalosporum Stripe. Feed type.

PI 639100. X Triticosecale sp.
Breeding. Pureline. KT941256h3063; NSGC 9513. Pedigree - LT371.90/5/Badia/3/63189/Cama/2/FW72001/Moro/4/UT132712. Erect plants, mid-tall, stiff, hollow culms, neck dense pubescent, winter, mid-hardy, early spring response, wide floppy leaf at boot, mid-late maturity, collar-no vee. Spike; fusiform, lax, long, awnless proxmal-awnless; distal to 4 cm, nodding. Rachilla; pubescent. Glume; bronze, long, pubescent, narrow. Shoulder; narrow, square. Beak; narrow, acuminate. Awn; bronze 4 cm. Kernel; brown, hard, long, elliptical, dorsal surface wrinkled. Brush; small, short. Germ; mid-size. Crease; wide, mid-deep. Cheeks; rounded. Good-plus leaf to stem ratio for forage. Good grain potential. Bulk of two plots from head-row seed. Excellent general disease resistance, except Fusarium Head Blight and Cephalosporum Stripe. Forage and Feed type.

PI 639101. X Triticosecale sp.
Breeding. Pureline. KT941256h3066; NSGC 9514. Pedigree - LT371.90/5/Badia/3/63189/Cama/2/FW72001/Moro/4/UT132712. Erect plants, mid-tall, stiff, hollow culms, neck dense pubescent, winter, mid-hardy, early spring response, wide floppy leaf at boot, mid-late maturity. Spike; fusiform, lax, long, awns to 4 cm tend to dehice, nodding. Rachilla; pubescent. Glume; bronze, long, dense pubescent, narrow. Shoulder; narrow, square. Beak; narrow, acuminate. Awn; bronze. Kernel; brown, hard, long, elliptical, dorsal surface wrinkled. Brush; small, short. Germ; mid-size. Crease; narrow, mid-deep. Cheeks; rounded. Good grain-forage potential. Bulk of three plots from head rows. Excellent general disease resistance, except Fusarium Head Blight and Cephalosporum Stripe. Forage and Feed type.

PI 639102. X Triticosecale sp.
Breeding. Pureline. KT941312SA018; NSGC 9515. Pedigree - M81-8046/FW82241,73830-004/79295,JJG/Paha..TJB...Y/H//H. Mid-tall, stiff, hollow culms, neck pubescent, winter, hardy, mid-early maturity. Spike; oblong, lax, long, sparse awned to 4 cm, nodding. Rachilla; pubescent. Glume; pubescent, bronze, long, narrow. Shoulder; narrow, square. Beak; narrow, acuminate. Awn; bronze. Kernel; brown, soft, long, elliptical, dorsal surface wrinkled. Brush; small, short. Germ; large. Crease; mid-wide, deep. Cheeks; rounded. Bulk of three plots from head row plots. Fair grain potential. Excellent general disease resistance, except Fusarium Head Blight and Cephalosporum Stripe. Forage and Feed type.

PI 639103. X Triticosecale sp.
Breeding. Pureline. KT941312SA024; NSGC 9516. Pedigree - M81-8046/FW82241,73830-004/79295,JJG/Paha..TJB...Y/H//H. Mid-tall, stiff, hollow culms, neck pubescent, winter, mid-hardy, early spring response, mid-early maturity. Spike; oblong, lax, long, awnleted to 4 cm, nodding. Rachilla; pubescent. Glume; pubescent, bronze, mid-long, narrow. Shoulder; narrow, square. Beak; narrow, acuminate. Awn; bronze. Kernel; brown, soft, long, elliptical, dorsal surface wrinkled. Brush; small, short. Germ; mid-size. Crease; mid-wide, deep. Cheeks; rounded. Bulk of two plots from head rows. Fair grain potential. Excellent g eneral disease resistance, except Fusarium Head Blight and Cephalosporum Stripe. Forage and Feed type.

PI 639104. X Triticosecale sp.
Breeding. Pureline. KT010127P2020; NSGC 9517. Pedigree - W20/tcl

f-4//CT/3/Celia/5/Rhino/3/EED/EER/Bat/4/Celia. Erect plants, medium height, stiff, partial to solid culms, neck pubescent, winter, mid-hardy, early spring response, mid-maturity. Spike; oblong, lax, long, awns to 10 cm, tend to erect. Rachilla; pubescent. Glume; white, short, pubescent, mid wide. Shoulder; narrow, near wanting. Beak; narrow, acuminate. Kernel; brown, soft, medium length, oval, dorsal surface wrinkled. Brush; small, short. Germ; mid-size. Crease; mid-wide, mid-deep. Cheeks; rounded. Excellent general disease resistance. Feed grains.

PI 639105. X Triticosecale sp.
Breeding. Pureline. KT010130CB001; NSGC 9518. Pedigree - A876*2/B 164/4/Badia/2/WA4995/Hys/3/FT86044. Mid-Tall, stiff hollow culms, winter hardy, mid-early maturity. Spike; fusiform, lax, mid long, awned, nodding. Rachilla; pubescent. Glume; white, glabrous, short, narrow, shoulder wanting. Beak; narrow, acuminate, short. Awn; white, to 8 cm, persistent. Kernel; biege, soft, mid-long, elliptical. Brush; large, mid-long. Germ; small. Crease; narrow, shallow. Cheeks; rounded. Good plus general disease resistance, except Fusarium Head Blight and Cephalosporum Stripe. Feed type.

PI 639106. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. KW9043; KW970018H9043; NSGC 9519. Pedigree - WKP-2/Hill81/3/D6644/Triticum urartu//Stephens. Medium height, stiff, winter, hardy, early spring response, mid-maturity. Spike; oblong, lax, awns-brown, to 8 cm. Glume; brown, short, glabrous, mid wide. Shoulder; mid-wide, oblique. Beak; narrow, acuminate. Kernel; white, soft, short, oval. Brush; short. Germ; mid-size. Crease; narrow, mid-deep. Cheeks; rounded. Baking and milling satisfactory. Good TCK resistance at Flora, Oregon. Adapted to higher elevations in Oregon.

PI 639107. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. KW981718h0024; NSGC 9520. Pedigree - OR850059/3/Luke*2/PI 178210//Stephens/4/KW941145. Medium height, stiff, winter, mid-hardy, early spring response, mid-early maturity. Spike; oblong, lax, awns white to 8 cm. Glume; white, short, glabrous, wide. Shoulder; wanting. Beak; narrow, acuminate. Kernel; white, soft, long, ovate. Brush; short. Germ; mid-size. Crease; narrow, mid-deep. Cheeks; rounded. Susceptable to TCK. Baking and milling fair.

PI 639108. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. KW960190-CB2B; NSGC 9521. Pedigree - ??//PI554600 (T. urartu)/H88-344 (T. dicoccoides). Medium height, stiff, winter, mid-hardy, mid-early maturity. Spike; oblong, lax, awns white to 10 cm. Glume; white, mid-long, glabrous, mid-wide. Shoulder; narrow, square. Beak; narrow, acuminate. Kernel; white, soft, mid-long, ovate. Brush; large. Germ; large. Crease; narrow, mid-deep. Cheeks; rounded. Baking and milling good.

The following were developed by Barry Glaz, USDA, ARS, Sugarcane Field Station, Canal Point, Florida 33438, United States; P.Y.P. Tai, USDA-ARS, Sugarcane Field Station, Star Route Box 8, Canal Point, Florida 33438, United States; John Dunckelman, Florida Sugar Cane League, P.O. Drawer 1208, Clewiston, Florida 33440, United States; Jack C. Comstock, USDA, ARS, US Sugarcane Research Field Station, 12990 US Hwy 441 N, Canal Point, Florida 33438, United States; Robert A. Gilbert, University of Florida, EREC, 3200

East Palm Beach Road, Belle Glade, Florida 33430-8003, United States; S. Edme, USDA-ARS, Sugarcane Field Station, 12990 US Highway 441N, Canal City, Florida 33438, United States; J. Davidson, Florida Sugar Cane League, Inc., P.O. Box 1208, Clewiston, Florida 33440, United States; J.D. Miller, USDA-ARS, Sugarcane Field Station, 12990 US Highway 441 N., Canal Point, Florida 33438, United States. Received 04/06/2005.

PI 639109. Saccharum sp.
Cultivar. Pureline. "CP 97-1944". CV-126. Pedigree - A complex hybrid of Saccharum officinarum, S. barberi, S. spontaneum, and S. sinense selected from progeny of a polycross made with `CP 80-1743' as the female parent. Has no pubescence along the leaf sheath, short auricles (<0.5 cm), and a nearly cylindrical internode. It has moderate wax bloom, a loosely adhering leaf sheath, and a dark purple stalk, both exposed and under the leaf sheath. The buds project belpurple growth rings, and its purple root bands usually have two rows of root primordia. Has shown field resistance in Florida to eye spot, rust, smut, and Sugarcane mosaic virus strain E. Is susceptible to Sugarcane yellow leaf virus, and is moderately susceptible to leaf scald and ratoon stunting disease. Susceptibility to ratoon stunting disease was based on the presence of colonized vascular bundles in inoculated tests.

PI 639110. Saccharum sp.
Cultivar. Pureline. "CP 97-1989". CV-127. Pedigree - CP 75-1091 x `CL 61-620'. Has no pubescence along the leaf sheath, short auricles (< 1 cm), and a conoidal-shaped internode. It has moderate wax bloom, a loosely adhering leaf sheath, and a light green stalk, although the green is lighter under the leaf sheath than on expo portions of the stalk. Round buds project below yellow growth rings, and its root bands usually have three rows of root primordia. Has shown field resistance in Florida to eye spot, rust, smut; and Sugarcane mosaic virus strain E. Is moderately susceptible to leaf scald and ratoon stunting disease, and is susceptible to Sugarcane yellow leaf virus. Moderate susceptibility to ratoon stunting disease was based on the presence of colonized vascular bundles in inoculated tests.

The following were developed by Millie Casey, Ohio State University, Ohio Agricultural Research And Development Center, Entomolgy Department, Wooster, Ohio 44691-4096, United States; Richard C. Pratt, The Ohio State University, OARDC, Department of Horticulture and Crop Science, Wooster, Ohio 44691-4096, United States. Received 03/28/2005.

PI 639111. Zea mays L.
Breeding. Pureline. Oh605; G24-4-5. GP-427. Pedigree - S2 progeny line (G24-4-5) arising from the cross between OhS3267LAN and W552. The S2 line from which Oh605 was selected was one of the selected lines that were recombined to form the OhS12 cycle 1 population. The line is unique in having a high proportion (25%) of its pedigree attributable to Native American land races from Arizona. At the S6 level of inbreeding. Intended as a breeding resource for the improvement and diversification of elite, non-`Reid Yellow Dent? related inbreds and may offer improved drought tolerance characteristics. Plant height approx. 150 cm with ear placement at 90 cm. Kernel color is yellow and cobs are red. Average of 14 kernel rows on ears that are 13.1 cm long and 4.5 cm wide. Appears to be neither highly susceptible, nor resistant to, common foliar diseases of maize in Ohio. Yield potential of is fairly good.

Crosses with BSSS-related testers showed mean yield 0.27 Mg/ha higher than the average of commercial check hybrids. Moisture content was higher than that of the commercial check averages. Stalk strength is fairly good. S4 testcrosses with B73 x B94 silk one day before B73 x Mo17 and show relative ear placement at about mid-plant height. Testcrosses have displayed slightly higher kernel protein, but slightly lower oil, when compared with the mean of the commercial checks. It is recommended that this inbred be introduced into breeding programs by crossing with elite inbreds followed by modified pedigree selection. Using this method, it is anticipated the agronomic characteristics can still be improved since only one cycle of selection has been practiced.

The following were donated by Manee Nikornpun, Chiang Mai University, Chiang Mai, Lampang, Thailand. Received 12/10/1992.

PI 639112. Solanum melongena L.
138; Grif 1372.

PI 639113. Solanum melongena L.
157; Grif 1388.

PI 639114. Solanum melongena L.
209; Grif 1433.

PI 639115. Solanum melongena L.
243; Grif 1467.

The following were donated by Will Bonsall, Scatterseed Project, 39 Bailey Road, Industry, Maine 04938, United States. Received 05/16/2000.

PI 639116. Solanum melongena L.
Uncertain. Kumari; Grif 14476. Collected 1999 in Sri Lanka. From garden in Lullulwatta.

PI 639117. Solanum melongena L.
Uncertain. Ratnayake; Grif 14479. Collected 1999 in Sri Lanka. From garden in Dambulla.

The following were collected by Philipp W. Simon, USDA, ARS, Vegetable Crops Research Unit, University of Wisconsin, Department of Horticulture, Madison, Wisconsin 53706, United States; Bassam Al-Safadi, Atomic Energy Commission, P.O. Box 6091, Damascus, Syria. Received 10/29/1999.

PI 639118. Solanum melongena L.
Landrace. S116; Grif 14514. Collected 1999 in Syria.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 11/1971.

PI 639119. Solanum melongena L.
Cultivated. W6 17736; Grif 13963. Collected 11/1971 in Iran. Collected in bazaar in Karaj. The purple fruit is long and slender.

The following were donated by Farmers Seed and Nursery Company, Faribault, Minnesota, United States. Received 1969.

PI 639120. Solanum melongena L.
NSL 6027; Grif 14167; MORDEN MIDGET.

The following were donated by Puerto Rico Agricultural Experiment Station, University of Puerto Rico, Mayaguez, Puerto Rico. Received 1961.

PI 639121. Solanum melongena L.
NSL 6277; Grif 14174; PUERTO RICAN BEAUTY.

The following were donated by USDA, ARS, Horticultural Station, P.O. Box 1250, Cheyenne, Wyoming, United States. Received 1977.

PI 639122. Solanum melongena L.
NSL 28159; Grif 14175; BLACKEE.

The following were donated by Gill Bros., Oregon, United States. Received 1964.

PI 639123. Solanum melongena L.
NSL 31383; Grif 14181; EARLY BLACK.

The following were donated by Robson Quality Seeds, Incorporated, Hall, New York, United States. Received 1964.

PI 639124. Solanum melongena L.
NSL 34240; Grif 14184; NEW HAMPSHIRE.

The following were donated by Asgrow Seed Company, Kalamazoo, Michigan, United States. Received 1966.

PI 639125. Solanum melongena L.
NSL 45605; Grif 14188; FLORIDA MARKET 10.

The following were collected by Helmer Ayala, Universidad de San Carlos de Guatemala, Ciudad Universitaria, Zona 12, Apartado Postal No 1545, San Carlos, Guatemala. Received 01/26/1998.

PI 639126. Capsicum annuum var. glabriusculum (Dunal) Heiser & Pickersgill
Landrace. FAUSAC 209; chiltepe; NGRL 273; Grif 14103. Collected 07/31/1997 in Jutiapa, Guatemala. Latitude 14° 20' N. Longitude 89° 42' W. Elevation 680 m. Asuncion Mita, Asuncion Mita.

The following were collected by Robert B. Halley, U.S. Geological Survey, USGS Center for Coastal Geology, 600 4th Street South, St. Petersburg, Florida 337071, United States. Donated by Karen A. Williams, USDA, ARS, Natl.

Germplasm Resources Laboratory, Building 003, Room 402, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 04/30/1999.

PI 639127. Capsicum annuum var. glabriusculum (Dunal) Heiser & Pickersgill Wild. NGRL 277; Grif 14230. Collected 06/03/1999 in Navassa Island, U.S. Outlying Islands. Latitude 18° 23' 48" N. Longitude 75° 0' 49" E. Elevation 60 m. Southeast of the lighthouse. Along the old railway. Shaded location. Growing in the reddish-brown, phosphate-rich residuum that comprises the soil of the island. Plant approximately 4 feet tall. Fruits approximately 1 cm long, erect, green, turning red at maturity.

The following were collected by Karen A. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 402, BARC-West, Beltsville, Maryland 20705-2350, United States; Fatima Mereles, Facultad de Ciencias Quimicas of the National University, Herbarium, San Lorenzo, Paraguay; Pedro Juan Caballero, Ministry of Agriculture and Livestock, Instituto Agronomico Nacional, Caacupe, Paraguay; David E. Williams, Internat'l Plant Genetic Resources Inst., Regional Office for the Americas, c/o CIAT, Int'l Ctr. for Tropical Agric., Cali, Valle, Colombia. Received 06/17/1998.

PI 639128. Capsicum baccatum L. **var. baccatum** Wild. WWMC 137; ky y'; Grif 14147. Collected 05/14/1998 in Cordillera, Paraguay. Latitude 25° 23' 11" S. Longitude 57° 8' 23" W. Elevation 250 m. Caacupe, Compania Caacupe, Hotel Uruguayo. Plant erect, semi-supported, 50 cm tall. Leaf size variable. Flowers white with yellowish green spots at the base of the corolla. Fruits erect, round, 1.5 cm diameter, light green changing to red when mature, piquant. Growing spontaneously in a flowerpot in the patio of a hotel. There may have been some gene flow with C. baccatum var. pendulum. Eaten by owner of hotel after pickling.

The following were collected by Karen A. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 402, BARC-West, Beltsville, Maryland 20705-2350, United States; Pedro Juan Caballero, Ministry of Agriculture and Livestock, Instituto Agronomico Nacional, Caacupe, Paraguay; David E. Williams, Internat'l Plant Genetic Resources Inst., Regional Office for the Americas, c/o CIAT, Int'l Ctr. for Tropical Agric., Cali, Valle, Colombia; M. Quintana, Museo Nacional de Historia Natural del Paraguay, Ruta Mariscal Estigarribia, Km 10.5, San Lorenzo, Paraguay. Received 04/09/2002.

PI 639129. Capsicum baccatum L. **var. baccatum** Wild. WWCQ-200; NGRL 280; Grif 15018. Collected 03/16/2002 in Caazapa, Paraguay. Latitude 26° 1' 44" S. Longitude 56° 30' 4" W. Elevation 125 m. Distrito Caazapa, Compania Nu Puajhu, N. of Caazapa on Route 8, milestone 206 from Asuncion. Edge of degraded mature secondary forest. Near stream. 1 m tall, multiple branches, many greenish-white flowers with spots at the base of the corollas. Many fruits, 1 cm long, mature fruits bright red.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Plant, & Environmental Sciences, Las Cruces, New Mexico 88003-0003, United States. Received 12/18/1992.

PI 639130. Capsicum sp. 9840; Grif 9356. Collected in Costa Rica.

PI 639131. Capsicum sp.
14033; Grif 9358. Collected in Costa Rica.

PI 639132. Capsicum sp.
Peru-5456; Grif 9361. Collected in Costa Rica. Received as Capsicum annuum and Capsicum chinense, 01/05/1994.

PI 639133. Capsicum sp.
Peru-5457; Grif 9362. Collected in Costa Rica. Received as Capsicum annuum and Capsicum chinense, 01/05/1994.

PI 639134. Capsicum sp.
180-C; Grif 9364. Collected in Colombia. Received as Capsicum annuum and Capsicum chinense, 01/05/1994.

PI 639135. Capsicum sp.
191-A; Grif 9366. Collected in Colombia. Received as Capsicum annuum and Capsicum chinense, 01/05/1994.

PI 639136. Capsicum sp.
199; Grif 9367. Collected in Colombia. Received as Capsicum annuum and Capsicum chinense, 01/05/1994.

PI 639137. Capsicum sp.
210; Grif 9368. Collected in Colombia. Received as Capsicum annuum and Capsicum chinense, 01/05/1994.

PI 639138. Capsicum sp.
BG2566; Grif 9401. Collected in Mexico.

PI 639139. Capsicum sp.
BG3215; Grif 9411. Collected in Mexico.

PI 639140. Capsicum sp.
BG3269; Grif 9412. Collected in Mexico.

PI 639141. Capsicum sp.
BG3279; Grif 9414. Collected in Mexico.

PI 639142. Capsicum sp.
BG3300; Grif 9416. Collected in Mexico.

PI 639143. Capsicum sp.
BG3491; Grif 9423. Collected in Mexico.

PI 639144. Capsicum sp.
BG3534; Grif 9425. Collected in Mexico.

PI 639145. Capsicum sp.
BG3734; Grif 9436. Collected in Mexico.

PI 639146. Capsicum sp.
BG3735; Grif 9437. Collected in Mexico.

PI 639147. Capsicum sp.
BG2690; Grif 9443. Collected in Mexico.

The following were developed by Johnnie Jenkins, USDA, ARS, Crop Sci. Res. Lab., P.O. Box 5367, Mississippi State, Mississippi 39760, United States; Jack C. McCarty, Jr., USDA-ARS, Crop Science Research Laboratory, P.O. Box 5367, Mississippi State, Mississippi 39762, United States. Received 04/06/2005.

PI 639148. Gossypium hirsutum L.
Breeding. Pureline. M75-1. GP-822. Pedigree - Developed from a cross between Deltapine 16 and the photoperiodic primitive race stock T-75. Has lower yield, lint percent and boll size compared to standard cultivars; however, fiber strength was improved 10-15 percent over standard cultivars. Detailed information on the development and evaluation of this line can be found in Miss. Agric. and For. Exp. Stn. Bull. 1130.

PI 639149. Gossypium hirsutum L.
Breeding. Pureline. M1388-1. GP-823. Pedigree - Developed from a cross between DES56 and the photoperiodic primitive race stock T-1388. Has lower lint percent, higher micronaire, lower elongation and shorter fibers compared to standard cultivars; however, fiber strength was improved 10-15 percent over standard cultivars. Detailed information on the development and evaluation of this line can be found in Miss. Agric. and For. Exp. Stn. Bull. 1130.

PI 639150. Gossypium hirsutum L.
Breeding. Pureline. M1388-2. GP-824. Pedigree - Developed from a cross between DES56 and the photoperiodic primitive race stock T-1388. Has lower yield, lower lint percent, smaller bolls, lower elongation and shorter fibers compared to standard cultivars; however, fiber strength was improved 20-25 percent over standard cultivars. Detailed information on the development and evaluation of this line can be found in Miss. Agric. and For. Exp. Stn. Bull. 1130.

PI 639151. Gossypium hirsutum L.
Breeding. Pureline. M1388-3. GP-825. Pedigree - Developed from a cross between DES56 and the photoperiodic primitive race stock T-1388. Has lower yield, lower lint percent, smaller bolls, lower elongation and shorter fibers compared to standard cultivars; however, fiber strength was improved 20-25 percent over standard cultivars. Detailed information on the development and evaluation of this line can be found in Miss. Agric. and For. Exp. Stn. Bull. 1130.

PI 639152. Gossypium hirsutum L.
Breeding. Pureline. M239-1. GP-826. Pedigree - Developed from a cross between Deltapine 16 and the photoperiodic primitive race stock T-239. Has lower yield, lower lint percent, lower percent fiber elongation, and shorter fibers compared to standard cultivars; however, fiber strength was improved 12-18 percent over standard cultivars. Detailed information on the development and evaluation of this line can be found in Miss. Agric. and For. Exp. Stn. Bull. 1130.

PI 639153. Gossypium hirsutum L.
Breeding. Pureline. M239-2. GP-827. Pedigree - Developed from a cross between Deltapine 16 and the photoperiodic primitive race stock T-239. Has lower yield, lower lint percent, higher micronaire, lower percent

fiber elongation, and shorter fibers compared to standard cultivars; however, fiber strength was improved 12-18 percent over standard cultivars. Detailed information on the development and evaluation of this line can be found in Miss. Agric. and For. Exp. Stn. Bull. 1130.

PI 639154. Gossypium hirsutum L.
Breeding. Pureline. M239-3. GP-828. Pedigree - Developed from a cross between Deltapine 16 and the photoperiodic primitive race stock T-239. Has lower yield, lower lint percent, higher micronaire, lower percent fiber elongation, and shorter fibers compared to standard cultivars; however, fiber strength was improved 12-20 percent over standard cultivars. Detailed information on the development and evaluation of this line can be found in Miss. Agric. and For. Exp. Stn. Bull. 1130.

PI 639155. Gossypium hirsutum L.
Breeding. Pureline. M239-4. GP-829. Pedigree - Developed from a cross between Deltapine 16 and the photoperiodic primitive race stock T-239. Has lower yield, lower lint percent, lower micronaire, and lower percent fiber elongation compared to standard cultivars; however, fiber strength was improved 10-18 percent over standard cultivars. Detailed information on the development and evaluation of this line can be found in Miss. Agric. and For. Exp. Stn. Bull. 1130.

PI 639156. Gossypium hirsutum L.
Breeding. Pureline. M239-5. GP-830. Pedigree - Developed from a cross between Deltapine 16 and the photoperiodic primitive race stock T-239. Has lower yield, lower lint percent, higher micronaire, and lower percent fiber elongation compared to standard cultivars; however, fiber strength was improved 10-18 percent over standard cultivars. Detailed information on the development and evaluation of this line can be found in Miss. Agric. and For. Exp. Stn. Bull. 1130.

PI 639157. Gossypium hirsutum L.
Breeding. Pureline. M239-6. GP-831. Pedigree - Developed from a cross between Deltapine 16 and the photoperiodic primitive race stock T-239. Has lower yield, lower lint percent, higher micronaire, and lower percent fiber elongation compared to standard cultivars; however, fiber strength was improved 12-20 percent over standard cultivars. Detailed information on the development and evaluation of this line can be found in Miss. Agric. and For. Exp. Stn. Bull. 1130.

PI 639158. Gossypium hirsutum L.
Breeding. Pureline. M239-7. GP-832. Pedigree - Developed from a cross between Deltapine 16 and the photoperiodic primitive race stock T-239. Has lower yield, lower lint percent, higher micronaire, lower percent fiber elongation, and shorter fibers compared to standard cultivars; however, fiber strength was improved 15-25 percent over standard cultivars. Detailed information on the development and evaluation of this line can be found in Miss. Agric. and For. Exp. Stn. Bull. 1130.

PI 639159. Gossypium hirsutum L.
Breeding. Pureline. M237-1. GP-833. Pedigree - Developed from a cross between Deltapine 16 and the photoperiodic primitive race stock T-237. Has lower yield, lower lint percent, lower micronaire, and lower percent fiber elongation compared to standard cultivars; however, fiber strength was improved 12-20 percent over standard cultivars. Detailed

information on the development and evaluation of this line can be found in Miss. Agric. and For. Exp. Stn. Bull. 1130.

PI 639160. Gossypium hirsutum L.
Breeding. Pureline. M237-2. GP-834. Pedigree - Developed from a cross between Deltapine 16 and the photoperiodic primitive race stock T-237. Has lower yield, lower lint percent, smaller bolls, lower micronaire, lower percent fiber elongation and longer fibers compared to standard cultivars; however, fiber strength was improved 12-18 percent over standard cultivars. Detailed information on the development and evaluation of this line can be found in Miss. Agric. and For. Exp. Stn. Bull. 1130.

PI 639161. Gossypium hirsutum L.
Breeding. Pureline. M237-3. GP-835. Pedigree - Developed from a cross between Deltapine 16 and the photoperiodic primitive race stock T-237. Has lower yield, lower lint percent, lower micronaire, lower percent fiber elongation and longer fibers compared to standard cultivars; however, fiber strength was improved 12-20 percent over standard cultivars. Detailed information on the development and evaluation of this line can be found in Miss. Agric. and For. Exp. Stn. Bull. 1130.

The following were developed by Thomas Gulya, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States; Jerry F. Miller, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, Fargo, North Dakota 58105, United States. Donated by Jerry F. Miller, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, Fargo, North Dakota 58105, United States. Received 04/06/2005.

PI 639162. Helianthus annuus L.
Breeding. Pureline. RHA 439. GP-293. Pedigree - RHA 439 is an F7-derived F8 oilseed restorer line selected from the cross RHA 377/AS 3211. A high-linoleic, sclerotinia head rot tolerant restorer germplasm line available for use by industry and public researchers to create hybrids, parental lines, or germplasms with improved sclerotinia head rot tolerance. The pedigree breeding method was used. Sclerotinia tolerance was selected by evaluating testcross hybrids that were artificially inoculated under irrigation. Height was 140 cm compared with a height of 138 cm for RHA 377. Days to flower was 63 d compared with 62 d for RHA 377. Has fertility restoration factors for the PET1 cytoplasmic male sterility and has upper-stem branching conditioned by a recessive gene.

PI 639163. Helianthus annuus L.
Breeding. Pureline. RHA 440. GP-294. Pedigree - RHA 440 is an F7-derived F8 oilseed restorer line selected from the cross RHA 377/AS 4379. A high-linoleic, sclerotinia head rot tolerant restorer germplasm line available for use by industry and public researchers to create hybrids, parental lines, or germplasms with improved sclerotinia head rot tolerance. The pedigree breeding method was used. Sclerotinia tolerance was selected by evaluating testcross hybrids that were artificially inoculated under irrigation. Height was 150 cm compared with a height of 138 cm for RHA 377. Days to flower was 67 d compared with 62 d for RHA 377. Has fertility restoration factors for the PET1 cytoplasmic male sterility and has upper-stem branching conditioned by a recessive gene.

PI 639164. Helianthus annuus L.
Breeding. Pureline. HA 441. GP-295. Pedigree - HA 441 is an F7-derived F8 maintainer line selected from the cross HA 412/SD. The pedigree breeding method was used in development. Sclerotinia tolerance of this line was selected by evaluating testcross hybrids that were artificially inoculated under mist irrigation. Height was 160 cm compared with a height of 145 cm for HA 412. Days to flower of HA 441 was 61 d compared with 56 d for HA 412.

The following were developed by Thomas Gulya, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States; Jerry F. Miller, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, Fargo, North Dakota 58105, United States; Brady A. Vick, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, Fargo, North Dakota 58105-5677, United States. Donated by Jerry F. Miller, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, Fargo, North Dakota 58105, United States. Received 04/06/2005.

PI 639165. Helianthus annuus L.
Breeding. Pureline. HA 442. GP-296. Pedigree - HA 442 is an F6-derived F7 maintainer line selected from the cross HA 425/87CAEB//HA 434/HA 412. A high-oleic maintainer germplasm line resistant to the imidazolinone herbicide, imazamox, and is available for use by industry and public researchers to create NuSun hybrids, parental lines, or improved germplasms with resistance to this herbicide. The pedigree breeding method was used. The oleic concentration was 851 g kg-1. Height was 125 cm compared with 123 cm for HA 434. Days to flower was 66 d compared with 63 d for HA 434. It is single-headed.

PI 639166. Helianthus annuus L.
Breeding. Pureline. RHA 443. GP-297. Pedigree - RHA 443 is an F6-derived F7 oilseed restorer line selected from the cross RHA 426/RHA 419//RHA 377/AS 4379. A high-linoleic, downy mildew resistant restorer germplasm line resistant to the imidazolinone herbicide, imazamox, and is available for use by industry and public researchers to create hybrids, parental lines, or improved germplasms with resistance to this herbicide. The pedigree breeding method was used. It is resistant to the downy mildew races 730, 770, 733, and 304, and the metalaxyl-insensitive strains of downy mildew collected from sunflower production field in North Dakota in 1998. Height was 135 cm compared with 118 cm for RHA 426. Days to flower was 67 compared with 71 for RHA 426. Has genes for fertility restoration of the PET1 cytoplasmic male sterility and has upper stem branching conditioned by a recessive gene.

PI 639167. Helianthus annuus L.
Breeding. Pureline. HA 444. GP-298. Pedigree - HA 444 is an F6-derived F7 maintainer line selected from the cross HA 434/HA 406. A high-oleic maintainer germplasm line with a relative short-stature and excellent lodging resistance. The pedigree breeding method was used. Analyses for oleic acid concentration were conducted by gas chromotography. Oleic acid concentration was 836 g/kg compared with the oleic acid concentration of 861 g/kg for HA 434. Height was 125 cm compared with 135 cm for HA 434. Days to flower was 63 d compared with 63 d for HA 434. It is single-headed.

PI 639168. Helianthus annuus L.
Breeding. Pureline. HA 445. GP-299. Pedigree - HA 445 is an F5-derived F6 maintainer line selected from the cross HA 434/87CAEB//HA 335/HA 434. A high oleic oilseed maintainer line with resistance to downy mildew caused by Plasmopara halstedii. Also has relative short stature derived from 87CAEB, a line obtained through a germplasm exchange with the Oil and Protein Seed Centre, Potchefstroom, South Africa. The pedigree breeding method was used. Analyses for oleic acid concentration were conducted by gas chromotography. The oleic acid concentration was 859 g/kg compared with the oleic acid concentration of 861 g/kg for HA 434. Height was 113 cm compared with 135 for HA 434. Days to flower was 65 d compared with 63 d for HA 434. Has resistance to the downy mildew race 730, conferred by the Pl6 gene derived from the line HA 335. This line also provides protection against metalaxyl-insensitive strains of downy mildew and is single-headed.

PI 639169. Helianthus annuus L.
Breeding. Pureline. HA 446. GP-300. Pedigree - HA 446 is an F5-derived F6 oilseed maintainer line selected from the cross HA 335/87CAEB//HA 434/HA 412. A high oleic oilseed maintainer line with resistance to downy mildew caused by Plasmopara halstedii. Has relative short stature derived from 87CAEB, a line obtained through a germplasm exchange with the Oil and Protein Seed Centre, Potchefstroom, South Africa. The pedigree breeding method was used. Analyses for oleic acid concentration were conducted by gas chromotography. The oleic acid concentration was 817 g/kg compared with the oleic acid concentration of 861 g/kg for HA 434. Height was 108 cm compared with 135 for HA 434. Days to flower was 66 d compared with 63 d for HA 434. Has resistance to the downy mildew race 730, conferred by the Pl6 gene derived from the line HA 335. This line also provides protection against metalaxyl-insensitive strains of downy mildew and is single-headed.

PI 639170. Helianthus annuus L.
Breeding. Pureline. RHA 447. GP-301. Pedigree - RHA 447 is an F7-derived F8 oilseed restorer germplasm line selected from the cross RHA 377/RHA 348. A high oleic oilseed restorer germplasm line. The pedigree breeding method was used. Analyses for oleic acid concentration were conducted by gas chromotography. The oleic acid concentration was 844 g/kg, compared with 821 g/kg for RHA 348. Height was 115 cm, compared with 155 for RHA 348. Days to flower was 65 d, compared with 63 d for RHA 348. Has genes for fertility restoration of the PET1 cytoplasmic male sterility and has upper stem branching conditioned by a recessive gene.

The following were developed by Jerry F. Miller, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, Fargo, North Dakota 58105, United States; C.E. Green, USDA-ARS-ANRI, Animal Manure and By-Products Lab, Bldg. 007, BARC-WEST, Beltsville, Maryland 20705, United States; Yin-M Li, 12019 Coldstream Dr., Potomac, Maryland 20854, United States; R.L. Chaney, USDA-ARS-ANRI, Animal Manure and By-Products Lab, Bldg. 007, BARC-WEST, Beltsville, Maryland 20705, United States. Received 04/06/2005.

PI 639171. Helianthus annuus L.
Breeding. Pureline. HA 448. GS-30. Pedigree - HA 448 is an F6-derived F7 confection maintainer genetic stock selected from the cross HA 323/HA 290. A confection maintainer genetic stock selected for low cadmium

uptake. The pedigree breeding method was used. Kernel cadmium content was determined during the breeding process. The cadmium content averaged over three years was 0.75 mg/kg compared to the average cadmium content of two check confection inbred lines of 1.34 and 0.88 mg/kg, respectively. Hybrids were produced by crossing with the restorer line RHA 450. This hybrid was compared in cadmium content with the commercial hybrid, Hybrid 924. The kernel cadmium content of the hybrid averaged 0.68 mg/kg compared with the average of Hybrid 924 of 1.38 mg/kg.

PI 639172. Helianthus annuus L.
Breeding. Pureline. HA 449. GS-31. Pedigree - HA 449 is an F6-derived F7 confection maintainer genetic stock selected from the cross HA 323/HA 290. A confection maintainer genetic stock selected for low cadmium uptake. The pedigree breeding method was used. Kernel cadmium content was determined during the breeding process. The cadmium content averaged over three years 0.64 mg/kg compared to the average cadmium content of two check confection inbred lines of 1.34 and 0.88 mg/kg, respectively. Hybrids were produced by crossing with the restorer line RHA 450. This hybrid was compared in cadmium content with the commercial hybrid, Hybrid 924. The kernel cadmium content of the hybrid averaged 0.67 mg/kg compared with the average of Hybrid 924 of 1.38 mg/kg.

PI 639173. Helianthus annuus L.
Breeding. Pureline. RHA 450. GS-32. Pedigree - HA 450 is an F6-derived F7 confection restorer genetic stock selected from the cross RHA 324/Primrose. A confection restorer genetic stock selected for low cadmium uptake. The pedigree breeding method was used. Primrose, used in the cross, is an ornamental accession with lemon-yellow flowers introduced from Poland and in preliminary tests, had low cadmium uptake into kernels. Kernel cadmium content was determined during the breeding process. The cadmium content averaged over three years was 0.55 mg/kg compared to the average cadmium content of two check confection inbred restorer lines of 1.19 and 0.70 mg/kg, respectively. Hybrids were produced by emasculating HA 448 and HA 449 and crossing with this restorer line. These hybrids were compared in cadmium content with the commercial hybrid, Hybrid 924. The kernel cadmium contents of the hybrids averaged 0.68 mg/kg compared with the average of Hybrid 924 of 1.38 mg/kg.

The following were developed by James S. Beaver, University of Puerto Rico, Mayaguez Camp, Department of Agronomy & Soils, P. O. Box 9030, Mayaguez, Puerto Rico; Juan C. Rosas, Escuela Agricola Panamericana, El Zamorano, P.O. Box 93, Tegucigalpa, Francisco Morazan, Honduras; R. Araya, Estacion Experimental Fabio Baudrit, Universidad de Costa Rica, A. Postal 183-4050, Alajuela, San Jose, Costa Rica; J.C. Hernandez, Direccion de Investigaciones Agricolas, Ministerio de Agricultura y Ganaderia, San Jose, Costa Rica; M. Alameda-Lozada, University of Puerto Rico, Agronomy and Soil Department, Mayaguez, Puerto Rico; D. Escoto, DICTA, Secretaria de Agricultura y Ganaderia, Danli, Honduras. Received 04/01/2005.

PI 639174. Phaseolus vulgaris L.
Cultivar. Pureline. "Carrizalito". CV-247. Pedigree - Tio Canela 75 / DICTA 105. A highly yielding cultivar with resistance to BGYMV and bean common mosaic virus. Recommended for bean production in the intermediate

to highland areas of Central America and the Caribbean. Has an indeterminate upright, type III growth habit with short vines. Is an early variety that matures at 68-70 days after planting. Stem color is green with red pigmentation. The immature pod is green which turns yellow with red pigmentation at physiological maturity. It has pods containing 6-7 seeds per pod and ovoid seeds averaging 22 g per 100 seeds. Dry seed coat color is shiny red which is commercially accepted in Central America. It has short cooking time, good flavor, and good broth color and thickness.

The following were developed by An H. Hang, Washington State University, Irrigated Agriculture Res. & Ext. Center, Route 2, Box 2953-A, Prosser, Washington 99350-9687, United States; George L. Hosfield, USDA, ARS, Michigan State University, Department of Crop & Soil Science, East Lansing, Michigan 48824-1325, United States; Matt Silbernagel, USDA, ARS, Vegetable Crop Production, IAREC, P.O. Box 30, Prosser, Washington 99350, United States; Phillip Miklas, USDA, ARS, Irrigated Agric. Research & Extension Ctr., 24106 North Bunn Road, Prosser, Washington 99350-9687, United States. Received 04/14/2005.

PI 639175. Phaseolus vulgaris L.
Cultivar. Pureline. "QUINCY". CV-256. Pedigree - RR Othello//*Othello*/A-55. A pinto type that has the combined I and bc-22 genes which together condition resistance to all known strains of Bean Common mosaic virus (BCMV) and Bean mosaic necrosis virus (BCMNV) and complete resistance to curly top virus (CTV). A type 2 to 3 plant growth habit depending upon the weather conditions of each year. Taller than Othello and about 4 to 7 days later. It is a medium to late maturity pinto variety. More upright with shorter vine than Othello, and produces reasonable yield under multiple stress conditions of low residual soil nitrogen with no fertilizer applied, low soil moisture (50% of water used requirement) and heavy root rot pressure mainly Fusarium solani. Susceptible to bean rust. Under favorable growing condition, produced equal or slightly higher yield than Othello. Seed of is slightly larger than Othello (43.7 vs 39.6 g per 100 seeds).

PI 639176. Phaseolus vulgaris L.
Cultivar. Pureline. "SILVER CLOUD". CV-257. Pedigree - *Lisa*/*Linden*. Has an upright bush growth habit that is resistant to lodging. Has the combined I and bc-1 genes, for resistance to BCMV and has unknown genes that condition complete resistance to BCTV. Tolerant to bean rust. Under stress conditions of low residual soil nitrogen (~22 kg ha-1) with no fertilizer applied, low soil moisture (irrigation water applied at ~50% of water used requirements based on evapo-transpiration schedules), and heavy root rot pressure, due mainly to Fusarium solani, produced 19 and 59% higher yield than Lassen and Beluga, respectively.Has a medium to late maturity averaging 96 d, 8 d later than Lassen. Pproduced an average of 2490 kg/ha across ~30 environment years. Has an attractive shiny white and large seed (54 g 100 seed-1).

The following were developed by Richard C. Frohberg, North Dakota State University, Crop & Weed Science Department, P.O. Box 5051, Fargo, North Dakota 58105-5051, United States; N.R. Riveland, Williston Research Extension Center, North Dakota Agric. Exp. Sta., 14120 Highway 2, Williston, North Dakota 58801, United States; R.W. Stack, North Dakota State University, Plant

Pathology Department, Fargo, North Dakota 58105, United States; James D. Miller, USDA-ARS, Dept. of Plant Pathology, North Dakota State University, Fargo, North Dakota, United States; Mohamed Mergoum, North Dakota State University, Plant Sciences Dept., Loftsgard Hall, Fargo, North Dakota 58105-5051, United States; T.C. Olson, North Dakota State University, Dept. of Cereal Science, Fargo, North Dakota 58105, United States. Received 04/13/2005.

PI 639177. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. ND 652. GP-783. Pedigree - Stoa/Amidon. Released 2005. Provides high level of resistance to common root rot (CRR) among adapted hard red spring wheat (HRSW) genotypes in the northern spring wheat region of the United States. Is also resistant to the prevalent pathotypes of stem rust in the region, and to leaf rust. Is an awned, medium-maturing and semi-dwarf HRSW. It has a lax spike type with plant height similar to Grandin (78 cm), 4 cm shorter than Stoa and Amidon; and 3 cm taller than Len. Is 1and 3 d later than Stoa and Grandin, respectively. It has a strong straw strength; therefore, it is resistant to lodging. Grain yield was similar to grain yield of Grandin and Len but slightly lower than Amidon and Stoa. Mean grain volume and protein were similar to Amidon and better than Stoa. Grain volume was significantly higher than Stoa and Chris. Flour yield was less than Grandin, Stoa, and Amidon. Water absorption was more than Amidon, comparable to Stoa, but less than Grandin. Mixogram mix time (after 3 h fermentation) was similar to Stoa and Grandin, but greater than Amidon. The mixing tolerance score was higher than Amidon, but lower than Stoa and Grandi. Loaf volume was comparable to Grandin, but greater than Amidon and Stoa.

The following were collected by Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 09/25/1985.

PI 639178. Salvia azurea var. grandiflora Benth.
Wild. Ames 4563; W6 17693. Collected 09/25/1985 in Kansas, United States. Elevation 311 m. Johnson County, De Soto Quad, T13S, R23E, NE1/4 of NE1/4 of Section 31, The Prairie Center. Growing in virgin prairie with Heliopsis, big bluestem, and Sorghastrum.

The following were collected by Walter Graves, University of California Cooperative Ext. Service (retired), 7665 Volclay Drive, San Diego, California 92119-1219, United States; Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Melvin Rumbaugh, R.R. 3, Box 125, Humboldt, Nebraska 68376, United States; Nicolay Portinier, Kamorov Institute of Botany, St. Petersburg, Leningrad, Russian Federation; Jay Hart, 20 Bush Lane, Ithaca, New York 14850, United States; Nicolay Khitrov, Dokvchaev Soil Institute, Pygevsky, per., 7., Moscow, Moscow 109017, Russian Federation. Received 01/1996.

PI 639179. Onobrychis cyri Grossh.
Wild. 0219; VIR 071; US 219; W6 17873. Collected 08/05/1995 in Russian Federation. Latitude 44° 25' 54" N. Longitude 40° 13' 53" E. Elevation 500 m. 1 km. north of Abadzekhskaya, south of Maykop. Past logged, now grazed, mowed hay. Slope 0-5%, aspect S. Light open. Soil

clay, limestone derived, pH 7.8. Seasonally dry, upper slope. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species boundary Hornbeam-Oak. Dominant shrub species Carpinus sp., Q. Petraea. Dominant herb/grass species legumes, Festuca pratensis. Population distribution patchy, abundance frequent. Growth habit semi-erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 05/1995.

PI 639180. Artemisia frigida Willd.
Wild. E94135; W6 18081. Collected 09/1994 in Mongolia. Latitude 46° 58' 15" N. Longitude 116° 45' 19" E. Elevation 595 m. East central Dornod Aimag, eastern Mongolia. Grass steppe. Similar to other recent sites in same general area. Aspect and slope flat.

PI 639181. Astragalus adsurgens Pall.
Wild. E94215; W6 18130. Collected 09/1994 in Mongolia. Latitude 47° 48' 23" N. Longitude 112° 43' 54" E. Elevation 625 m. Near Hulunbaer Sum west of Choibalson city, close to Herlen River. Collections from destabilized dunes at edge of grass steppe and moist meadows along river. Grass steppe (with dunes and marsh).

PI 639182. Aconogonon divaricatum (L.) Nakai
Wild. E94218; W6 18133. Collected 09/1994 in Mongolia. Latitude 47° 41' 20" N. Longitude 112° 30' 12" E. Elevation 716 m. On dunes formed along Herlen River west of Choibalson. Grass steppe (with dunes). Aspect northwest, slope 3%.

The following were donated by Giovanni Figliuolo, University of Basilicata, Via N. Sauro, 85, Potenza, Basilicata 85100, Italy. Received 04/1998.

PI 639183. Echinops ritro L.
Cultivated. W6 20650. Climate: Eu-Mediterranean. 750 m above sea level. Uses: ornamental, medicinal. Annual.

The following were collected by Harold E. Bockelman, USDA, ARS, National Small Grains Collection, 1691 S 2700 W, Aberdeen, Idaho 83210, United States; Richard C. Johnson, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Roman Boguslavsky, National Centre for Plant Genetic Resources of Ukraine, Lab. for Introduction & Storage of Plant Genetic Resources, Yurjev Institute of Plant Production, Kharkiv, Kharkiv 61060, Ukraine; Vladislav Korzhenevsky, State Nikitsky Botanical Gardens, Department of Flora & Vegetation, Yalta, Krym 334267, Ukraine. Received 08/15/1999.

PI 639184. Astragalus guttatus Banks & Sol.
Wild. UKR-99-113; W6 21775. Collected 07/31/1999 in Krym, Ukraine.

Latitude 44° 30' 41" N. Longitude 33° 50' 48" E. Elevation 420 m. In lake valley near Peredove. South slope, grazed, rocky.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, U.S. Peace Corps, Cuerpo de Paz, Casilla #749, Sucre, Chuquisaca, Bolivia; Isabella Arevshatyan, Yerevan, Armenia; Eleonora Gabrielian, Department of Plant Systemics, Geography National Academie of Sciences, Institute of Botany, Yerevan, Armenia; Samvel M. Gasparian, Scientific Research Center of Viticulture, Fruit Growing and Wine Making, Merdzavan, Armenia; Vrez Manakyan, Armenia Academie of Science, Institute of Botany, Yerevan, Armenia; Ashot A. Charchoglian, National Academie of Sciences, Institute of Botany, Yerevan, Armenia. Received 06/24/2002.

PI 639185. Trigonella foenum-graecum L.
Wild. ARM 173; W6 23904. Collected 08/12/2001 in Armenia. Latitude 40° 6' 27" N. Longitude 44° 28' 11" E. Elevation 897 m. Prosspekti Market, a large indoor market in Yerevan. Purchased seeds and garlic in this market. Where grown in on seed packets.

The following were collected by Dennis P. Sheehy, 69086 Allen Canyon Road, Wallowa, Oregon 97885, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 11/12/1996.

PI 639186. Hibiscus trionum L.
Wild. E94044; Grif 13895. Collected 09/06/1994 in Mongolia. Latitude 47° 22' 7" N. Longitude 110° 20' 40" E. Elevation 1256 m. Approximately 75 km west of Onderhan City, Hentii Aimag; irrigated experimental farm. Germplasm was collected from native species growing near the cultivated areas. It was apparent that native species were also benefitting from application of irrigation water to the vegetables being grown in paddy style plots.

The following were developed by R.T. Robbins, University of Arkansas, Nematology Lab, Fayetteville, Arkansas 72701, United States; Robert D. Riggs, University of Arkansas, Department of Plant Pathology, 217 Plant Science Building, Fayetteville, Arkansas 72701, United States; John Rupe, University of Arkansas, Department of Plant Pathology, PTSC 217, Fayetteville, Arkansas 72701, United States; Clay H. Sneller, Ohio State University, O.A.R.D.C., 1680 Madison Avenue, Wooster, Ohio 44691, United States; Pengyin Chen, University of Arkansas, Department of Crop, Soil & Environmental Sciences, Soybean Breeding and Genetics, Fayetteville, Arkansas 72701, United States. Received 04/22/2005.

PI 639187. Glycine max (L.) Merr.
Cultivar. Pureline. "UA 4805". CV-474; PVP 200600045. Pedigree - Hartz 5545 x KS 4895. Determinate cultivar with a relative maturity of 4.8. It has purple flowers, gray pubescence, and tan pod walls. Plant height ranges from 70 to 80cm. Seeds have yellow cotyledons with dull yellow seed coats and buff hila with seed size of 11.4 g/100 seeds. Lodging, shattering, and seed quality scores range from 1 to 2. Seed protein and oil contents are 417 g/kg and 195 g/kg, respectively. Is resistant to

southern stem canker, sudden death syndrome, and frogeye leaf spot. It is moderately resistant to root knot nematode, and is susceptible to races 2, 3, and 14 of soybean cyst nematode and Soybean mosaic virus.

The following were developed by J. Brad Morris, USDA, ARS, Plant Genetic Resources Conservation Unit, 1109 Experiment Street, Griffin, Georgia 30223-1797, United States. Received 04/28/2005.

PI 639188. Macroptilium lathyroides (L.) Urb.
Uncertain. Pedigree - Selection from PI 276184. Spreading plant habit.

PI 639189. Macroptilium lathyroides (L.) Urb.
Uncertain. Pedigree - Selection from PI 420859. Spreading plant habit.

The following were donated by Ron Cordsiemon, USDA, NRCS, Elsberry Plant Materials Center, 2803 North Highway 79, Elsberry, Missouri 63343, United States. Received 04/29/2005.

PI 639190. Koeleria macrantha (Ledeb.) Schult.
Cultivated. 9068620; Northern Iowa Germplasm Praire Junegrass; SG0-02-1A21; W6 27582. Collected 2003 in Iowa, United States. Collections were taken from native praire remnants within the three tiers of counties located in Northern Iowa. Northern Iowa Germplasm Praire Junegrass is a collection of naturally occurring germplasm and has been unaltered. I did not meet the assessment of a plant that could become invasive based on guidelines adopted by NRCS Plant Materials Program. Was released by Natural Resources Conservation Service (NRCS), Elsberry, Missouri, the University of Northern Iowa, Cedar Falls, Iowa, the Iowa Integrated Roadside Vegetation Management Program, Cedar Falls, Iowa, the Iowa Department of Transportation, Ames, Iowa, the Iowa Crop Improvement Association, Ames, Iowa.

The following were developed by Ken P. Vogel, USDA, ARS, University of Nebraska, Dept. of Agronomy, Lincoln, Nebraska 68583-0937, United States; Andy Beal, University of Wisconsin-Madison, Department of Agronomy, 1575 Linden Drive, Madison, Wisconsin 53706-1597, United States; Michael D. Casler, USDA, ARS, U.S. Dairy Forage Research Center, University of Wisconsin, Madison, Wisconsin 53706-1108, United States. Received 04/26/2005.

PI 639191. Panicum virgatum L.
Breeding. Population. WS4U. GP-92. Pedigree - Polycross of plants from eight cultivars (13%); breeding lines from the USDA-ARS program at Lincoln, NE (2%); prairie-remnant collections from Indiana, Michigan, and Minnesota (6%); and prairie-remnant collections from South Dakota (79%). Switchgrass seedlings from 135 germplasm sources were used, and 20 seedlings of each germplasm source were transplanted to three space planted nurseries. The germplasm sources consisted of 21 cultivars or experimental populations and 114 plant introductions from USDA-NPGS-GRIN. All but 13 of the plant introductions were collected from prairie remnants in eastern South Dakota. Plants were visually evaluated for vigor, lodging resistance, large stem size, and rust reaction. Two hundred fifty plants were selected from the three spaced-plant nurseries. One leaf per plant was analyzed for ploidy level determination using flow cytometry. Based on nuclear DNA content,

plants were classified as tetraploid (n = 152) or octaploid (n = 98). Expected DNA content was 3.0 pg/nucleus for tetraploids (2n=4x=36), 4.5 pg/nucleus for hexaploids (2n=6x=54), and 6.0 pg/nucleus for octaploids (2n=8x=72). The use of DNA content for ploidy classification is less precise than chromosome counts and these classifications should not be taken as a warranty that all plants within each population have the designated euploid chromosome number, and the population may contain aneuploids and/or hexaploids. The plants classified as tetraploid were the parents of WS4U.

PI 639192. Panicum virgatum L.
Breeding. Population. WS8U. GP-93. Pedigree - Polycross of plants from eight cultivars (52%); breeding lines from the USDA-ARS program at Lincoln, NE (19%); prairie-remnant collections from Indiana, Michigan, and Minnesota (12%); and prairie-remnant collections from South Dakota (17%). Switchgrass seedlings from 135 germplasm sources were used, and 20 seedlings of each germplasm source were transplanted to three space planted nurseries. The germplasm sources consisted of 21 cultivars or experimental populations and 114 plant introductions from USDA-NPGS-GRIN. All but 13 of the plant introductions were collected from prairie remnants in eastern South Dakota. Plants were visually evaluated for vigor, lodging resistance, large stem size, and rust reaction. Two hundred fifty plants were selected from the three spaced-plant nurseries. One leaf per plant was analyzed for ploidy level determination using flow cytometry. Based on nuclear DNA content, plants were classified as tetraploid (n = 152) or octaploid (n = 98). Expected DNA content was 3.0 pg/nucleus for tetraploids (2n=4x=36), 4.5 pg/nucleus for hexaploids (2n=6x=54), and 6.0 pg/nucleus for octaploids (2n=8x=72). The use of DNA content for ploidy classification is less precise than chromosome counts and these classifications should not be taken as a warranty that all plants within each population have the designated euploid chromosome number, and the population may contain aneuploids and/or hexaploids. The plants classified at octaploid were the parents of WS8U.

The following were developed by David Hole, Utah State University, Plants, Soils, & Biometeorology Dept., 4820 Old Main Hill, Logan, Utah 84322-4820, United States; S.A. Young, Utah State University, Plants, Soils, and Biometerorology Department, Logan, Utah 84322-4820, United States; Rulon S. Albrechtsen, Utah State University, Plant Science Department, Logan, Utah 84322-4820, United States; Dominique Roche, Utah State University, Dept. of Plants, Soils & Biochemistry, Ag. Sci. Bldg. 332, Logan, Utah 84322-4820, United States; J.W. Clawson, Utah State University, Dept. of Plants, Soils, and Biometeorology, Logan, Utah 84322-4820, United States. Received 04/26/2005.

PI 639193. Hordeum vulgare L. **subsp. vulgare**
Cultivar. Pureline. "GOLDENEYE"; UT95B1216-4087. CV-320; PVP 200600103. Pedigree - ID633019/Woodvale//Steptoe//OR3. Released 2005. A six-rowed, erect-growing, early heading spring feed barley. It has a lax head with limited overlapping of upper lateral spikelets. The basal rachis internode has a short straight to curved shape, and the collar is closed to a V-shaped type. The length of the rachis internodes is relatively constant from top to bottom of the spike, and the rachis edges have few hairs. The awns are long and semi-smooth. The glumes are hairy on dorsal surfaces and edges. No hairs are visible on the ventral surface of the

glumes. Length of glume awns is more than equal to length of glumes. The seed is covered. Lemma teeth are missing or few and confined to the nerves. The rachilla is short haired. The shape of lemma base is a transverse crease type. Hulls are slightly to semi-wrinkled and aleurone color is white.

The following were donated by Phillip Miklas, USDA, ARS, Irrigated Agric. Research & Extension Ctr., 24106 North Bunn Road, Prosser, Washington 99350-9687, United States. Received 05/28/2003.

PI 639194. Phaseolus acutifolius A. Gray
Cultivated. ZAA 12(A43); W6 24322. Isolates of Pseudomonas syringae pv. phaseolicola from Africa and other bean growing areas were categorized into nine races on the basis of their reactions to eight differenatial cultivars following artifical inoculation. This accessions is one of the eight differential cultivars.

PI 639195. Phaseolus vulgaris L.
Cultivated. ZAA 54(A52); W6 24323. Isolates of Pseudomonas syringae pv. phaseolicola from Africa and other bean growing areas were categorized into nine races on the basis of their reactions to eight differenatial cultivars following artifical inoculation. This accessions is one of the eight differential cultivars.

PI 639196. Phaseolus vulgaris L.
Cultivated. ZAA 55(A53); W6 24324. Isolates of Pseudomonas syringae pv. phaseolicola from Africa and other bean growing areas were categorized into nine races on the basis of their reactions to eight differenatial cultivars following artifical inoculation. This accessions is one of the eight differential cultivars.

PI 639197. Phaseolus vulgaris L.
Cultivated. Canadian Wonder (differential); W6 24325. Isolates of Pseudomonas syringae pv. phaseolicola from Africa and other bean growing areas were categorized into nine races on the basis of their reactions to eight differenatial cultivars following artifical inoculation. This accessions is one of the eight differential cultivars.

PI 639198. Phaseolus vulgaris L.
Cultivated. Guatemala 196-B; W6 24326. Isolates of Pseudomonas syringae pv. phaseolicola from Africa and other bean growing areas were categorized into nine races on the basis of their reactions to eight differenatial cultivars following artifical inoculation. This accessions is one of the eight differential cultivars.

PI 639199. Phaseolus vulgaris L.
Cultivated. Red Mexican UI3; W6 24327. Isolates of Pseudomonas syringae pv. phaseolicola from Africa and other bean growing areas were categorized into nine races on the basis of their reactions to eight differenatial cultivars following artifical inoculation. This accessions is one of the eight differential cultivars.

PI 639200. Phaseolus vulgaris L.
Cultivated. Tendergreen (differential); W6 24328. Isolates of Pseudomonas syringae pv. phaseolicola from Africa and other bean growing areas were categorized into nine races on the basis of their reactions

to eight differenatial cultivars following artifical inoculation. This accessions is one of the eight differential cultivars.

The following were donated by Luis del Rio, North Dakato State University, Department of Plant Pathology, 306 Welster Hall, Fargo, North Dakota 58105-5012, United States. Received 06/23/2003.

PI 639201. Phaseolus acutifolius A. Gray
Cultivated. 1072; W6 24330. Isolates of Pseudomonas syringae pv. phaseolicola from Africa and other bean growing areas were categorized into nine races on the basis of their reactions to eight differenatial cultivars following artifical inoculation. This accessions is one of the eight differential cultivars.

The following were donated by Hector Lozoya, Pictipapa, Conjunto Sedagro, Dom. conocido, Metepec, Mexico 52142, Mexico. Received 08/27/2004.

PI 639202. Solanum tuberosum L.
Breeding. A00499-39; Q 44218.

PI 639203. Solanum tuberosum L.
Breeding. A00531-01; Q 44220.

The following were donated by Sandra Goodfellow, Scottish Agricultural Science Agency, East Craigs, Edinburgh, Scotland EH12 8NJ, United Kingdom. Received 11/19/2004.

PI 639204. Solanum tuberosum L.
Cultivar. "ALWARA"; Q 44276. Early to intermediate maturing; red skin; yellow flesh; oval to long tuber shape. Resistance to PVA and PVY.

PI 639205. Solanum tuberosum L.
Cultivar. "BERNADETTE"; Q 44277. Early maturing; white skin; light yellow flesh; oval to long tuber shape. Resistance to Wart and PVY.

The following were donated by Phillip D. Griffiths, Cornell University, Department of Horticultural Science, 302 Hedrick Hall, Geneva, New York 14456-0462, United States; Seed Savers Exchange, 3076 North Winn Road, Decorah, Iowa 52101, United States; Gary Ibsen, TomatoFest, P.O. Box W-1, Carmel, California 93921, United States; Gary Ibsen, TomatoFest, P.O. Box W-1, Carmel, California 93921, United States. Received 09/29/2004.

PI 639206. Solanum lycopersicum L. **var. lycopersicum**
Cultivar. "Basinga"; 04PG1. Indeterminate. Days to maturity: 80. Heirloom variety. Fruits medium-large, heart-shaped, yellow in color with pink highlights on the blossom end. Sweet delicate tangy flavor, mild but not bland. Origin is unknown, but some believe it's from Russia. Moderate to heavy producer.

The following were developed by Tomato Growers Supply Company, 12165 Metro Parkway, #14, Fort Myers, Florida 33906, United States. Donated by Phillip D. Griffiths, Cornell University, Department of Horticultural Science, 302

Hedrick Hall, Geneva, New York 14456-0462, United States. Received 09/29/2004.

PI 639207. Solanum lycopersicum L. **var. lycopersicum**
Cultivar. "Black Cherry"; 04PG2. Indeterminate. Days to maturity: 65. Heirloom variety. Described as looking like beautiful large, dusky purple grapes; they have that rich flavor that makes black tomatoes famous. Market growers report that this fruit picks clean from the stem and is produced in abundance on vigorous, tall plants. Very unique and delicious.

The following were donated by Phillip D. Griffiths, Cornell University, Department of Horticultural Science, 302 Hedrick Hall, Geneva, New York 14456-0462, United States; Seed Savers Exchange, 3076 North Winn Road, Decorah, Iowa 52101, United States. Received 09/29/2004.

PI 639208. Solanum lycopersicum L. **var. lycopersicum**
Cultivar. "Black from Tula"; 04PG3. Collected in Tula, Russian Federation. Indeterminate. Days to maturity: 80-85. A robust Russian heirloom variety, and the largest of the dramatic blacks, with dark, greenish-black shoulders on dark, brownish-red, slightly flattened fruits that grow to 3 to 5" in diameter. Flesh is chocolate-brown with green gel. Described as "ugly" but has a rich, sweet flavor that is delicious. Performs well in dry conditions. Not troubled by disease. A good choice for short-seasoned summers; very productive.

The following were donated by Johnny's Selected Seeds, Foss Hill Road, Albion, Maine 04910, United States; Phillip D. Griffiths, Cornell University, Department of Horticultural Science, 302 Hedrick Hall, Geneva, New York 14456-0462, United States; Seed Savers Exchange, 3076 North Winn Road, Decorah, Iowa 52101, United States. Received 09/29/2004.

PI 639209. Solanum lycopersicum L. **var. lycopersicum**
Cultivar. "Brandywine"; 04PG4. Collected 1885 in United States. Indeterminate. Days to maturity: 78. An old Amish heirloom tomato dating back to 1885. Considered to be the world's best flavored tomato. Beefsteak type, pink, oblate shaped, with thin skin and a rich flavor. Pole tomato that prefers well drained soil that is high in organic matter. Fruits will attain weights of up to 1 pound.

The following were donated by Phillip D. Griffiths, Cornell University, Department of Horticultural Science, 302 Hedrick Hall, Geneva, New York 14456-0462, United States; Tomato Growers Supply Company, 12165 Metro Parkway, #14, Fort Myers, Florida 33906, United States. Received 09/29/2004.

PI 639210. Solanum lycopersicum L. **var. lycopersicum**
Cultivar. "Burgess Stuffing"; 04PG5. Indeterminate. Days to maturity: 75. Heirloom variety. Plant produces good yields of large bright red tomatoes that has the appearance of a hollow bell pepper. Stuff with salads or bake like stuffed peppers. A gourmet variety that has very few seeds.

The following were donated by Phillip D. Griffiths, Cornell University, Department of Horticultural Science, 302 Hedrick Hall, Geneva, New York 14456-0462, United States; Seed Savers Exchange, 3076 North Winn Road, Decorah, Iowa 52101, United States. Received 09/29/2004.

PI 639211. Solanum lycopersicum L. **var. lycopersicum**
Cultivar. "Cherokee Purple"; 04PG6. Collected in Tennessee, United States. Indeterminate. Days to maturity: 75. A Tennessee Heirloom variety. Fruits round to oblate, dusty rose/purple, large (8-12 oz.) with greenish shoulders. Taste is exquisite, described as delicious, with a pleasantly sweet and rich flavor; also described as "smokey flavored". Shows tolerance to mild drought, as well as to common diseases. A relatively shory plant that produces large yields.

The following were donated by Phillip D. Griffiths, Cornell University, Department of Horticultural Science, 302 Hedrick Hall, Geneva, New York 14456-0462, United States; Tomato Growers Supply Company, 12165 Metro Parkway, #14, Fort Myers, Florida 33906, United States. Received 09/29/2004.

PI 639212. Solanum lycopersicum L. **var. lycopersicum**
Cultivar. "Delicious"; 04PG7. Indeterminate. Days to maturity: 77. Huge red fruits are globe shaped, smooth, nearly solid and often weigh more than 2 lbs. Excellent flavor, tiny seed cavities, and very little cracking. This heirloom variety holds the world record for the largest tomato ever grown.

The following were donated by Phillip D. Griffiths, Cornell University, Department of Horticultural Science, 302 Hedrick Hall, Geneva, New York 14456-0462, United States; Seed Savers Exchange, 3076 North Winn Road, Decorah, Iowa 52101, United States. Received 09/29/2004.

PI 639213. Solanum lycopersicum L. **var. lycopersicum**
Cultivar. "Juane Flamme"; 04PG10. Collected in France. Indeterminate. Days to maturity: 70-80. Beautiful apricot-shaped heirloom from France. Great for drying, retains deep orange color. Excellent bitey flavor. Very productive, fruits grow in clusters and weigh 2-3 ounces. Uniquely colored tomato, orange skin with reddish interior, like a blood orange. Very high yields on this fairly resistant plant.

The following were donated by Phillip D. Griffiths, Cornell University, Department of Horticultural Science, 302 Hedrick Hall, Geneva, New York 14456-0462, United States; Tomato Growers Supply Company, 12165 Metro Parkway, #14, Fort Myers, Florida 33906, United States. Received 09/29/2004.

PI 639214. Solanum lycopersicum L. **var. lycopersicum**
Cultivar. "Jersey Devil"; 04PG11. Indeterminate. Days to maturity: 80. Heirloom variety. Paste tomato. regular leaf. Good yields of 4 to 6 inch long, tapered red fruits shaped like banana peppers. The tomatoes are very meaty and sweet with few seeds. Color is a gorgeous bright red and yield is impressive.

The following were donated by Phillip D. Griffiths, Cornell University, Department of Horticultural Science, 302 Hedrick Hall, Geneva, New York

14456-0462, United States; Seed Savers Exchange, 3076 North Winn Road, Decorah, Iowa 52101, United States. Received 09/29/2004.

PI 639215. Solanum lycopersicum L. **var. lycopersicum**
Cultivar. "Principe Borghese"; 04PG14. Collected in Italy. Determinate. Days to maturity: 75. An old Italian heirloom variety with excellent flavor and color. Paste tomato. Fruits are red, small, 2 inch, plum shaped, and meaty, with little juice and few seeds. Used for drying. Very profolic plants that bear heavily and ripen early. Plants need additional support due to the heavy crop.

The following were developed by John F. Swenson, 245 Hawthorn Avenue, Glencoe, Illinois 60022, United States. Donated by Phillip D. Griffiths, Cornell University, Department of Horticultural Science, 302 Hedrick Hall, Geneva, New York 14456-0462, United States; Seed Savers Exchange, 3076 North Winn Road, Decorah, Iowa 52101, United States. Received 09/29/2004.

PI 639216. Solanum lycopersicum L. **var. lycopersicum**
Cultivar. "Roman Candle"; 04PG15. Indeterminate. Days to maturity: 85-90. An heirloom varity that is one of the few pure-yellow banana-shaped fruits available to gardeners. Fruits smooth, neon yellow, banana-shaped; two inches wide and four inches long. Very meaty with nice flavor. This variety originated as a sport from John Swenson's "Speckled Roman" (Mr. Swenson is a Seedsavers Exchange member).

The following were donated by Phillip D. Griffiths, Cornell University, Department of Horticultural Science, 302 Hedrick Hall, Geneva, New York 14456-0462, United States; Seed Savers Exchange, 3076 North Winn Road, Decorah, Iowa 52101, United States. Received 09/29/2004.

PI 639217. Solanum lycopersicum L. **var. lycopersicum**
Cultivar. "Striped Cavern"; 04PG17. Indeterminate. Days to maturity: 80. Unique heirloom variety. Fruits are orange-red with bright yellow stripes; shaped like a bell pepper. Fruits are hollow inside, but have very thick walls, meaty; average weight is 8 ounces. Produces few seeds. Perfect for stuffing, but also fine for slicing and eating fresh. Good yielding plants; excellent keeper (up to 4 weeks when harvested ripe).

The following were donated by Phillip D. Griffiths, Cornell University, Department of Horticultural Science, 302 Hedrick Hall, Geneva, New York 14456-0462, United States; Tomato Growers Supply Company, 12165 Metro Parkway, #14, Fort Myers, Florida 33906, United States. Received 09/29/2004.

PI 639218. Solanum lycopersicum L. **var. lycopersicum**
Cultivar. "Yellow Stuffer"; 04PG21. Indeterminate. Days to maturity: 76. A yellow-fruited stuffing tomato that looks like a blocky bell pepper. An heirloom variety, perfect for slicing or stuffing. Plants, tall, vigorous and the vines bear profusely.

The following were donated by Phillip D. Griffiths, Cornell University, Department of Horticultural Science, 302 Hedrick Hall, Geneva, New York 14456-0462, United States; Seed Savers Exchange, 3076 North Winn Road, Decorah, Iowa 52101, United States. Received 09/29/2004.

PI 639219. Solanum lycopersicum L. **var. lycopersicum**
Cultivar. "Hillbilly Potato Leaf"; 04PG22. Collected in West Virginia, United States. Indeterminate. Days to maturity: 85. An old heirloom variety that originally came from the hills of West Virginia. Heavy producer, large beefsteak-type fruits, 1-2 pounds, yellow-orange in color with red streaking on the blossom end. The flavor is sweet and fruity (mild, low acid taste).

The following were developed by Don R. Viands, Cornell University, Department of Plant Breeding, 523 Bradfield Hall, Ithaca, New York 14853, United States; J.L. Hansen, Cornell University, Dept. of Plant Breeding and Biometry, Ithaca, New York 14853-1902, United States; Jamie L. Neally, Cornell University, Department of Plant Breeding Forage Project, 101 Love Laboratory, Ithaca, New York 14853, United States; E.M. Thomas, Cornell University, Dept. of Plant Breeding and Genetics, Ithaca, New York 14853, United States. Received 05/06/2005.

PI 639220. Medicago sativa L. **subsp. sativa**
Cultivar. Population. "Guardsman II". CV-203. Pedigree - 29-clone synthetic originating from Iroquois-type germplasm sources labeled at Cornell as B x A, crossed onto Oneida VR. A moderately dormant cultivar with fall dormancy similar to the FD4 check. It has high resistance to bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, and Phytophthora root rot. Iis susceptible to Aphanomyces root rot. In NY, Guardsman II averaged 1.25 Mg/ha per year more dry forage than 'Oneida VR', 1.95 Mg/ha more than 'Vernal', and 1.86 Mg/ha more than 'Alfagraze' in three production years. Concentrations of crude protein, neutral detergent fiber, and acid detergent fiber are between those of the high quality check cultivar WL 322HQ and '5432'. Flower color of the Syn. 2 generation is 97% purple, 3% variegated, and a trace of yellow, cream, and white.

The following were developed by Pioneer Hi-Bred International, Inc, United States. Received 05/06/2005.

PI 639221 PVPO. Brassica napus L.
NS5095. PVP 200500122.

PI 639222 PVPO. Brassica napus L.
NS5080. PVP 200500123.

PI 639223 PVPO. Brassica napus L.
NS3161. PVP 200500124.

The following were developed by Nickerson-Zwaan B.V., Attn: Doretta Akkermans, Postbus 4, Warmenhuizen, Netherlands. Received 05/06/2005.

PI 639224 PVPO. Lactuca sativa L.
Cultivar. 44-4703. PVP 200500192.

PI 639225 PVPO. Lactuca sativa L.
Cultivar. 44-4704. PVP 200500193.

The following were developed by Cascade International Seed Company, 8483 W. Stayton Rd., Aumsville, Oregon 97325, United States. Received 05/06/2005.

PI 639226 PVPO. Festuca arundinacea Schreb.
Cultivar. Turbo. PVP 200500194.

The following were developed by Monsanto Company, 800 North Lindbergh Blvd., St. Louis, Missouri 63167, United States. Received 05/06/2005.

PI 639227 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "Branson"; M00-3701. PVP 200500195. Pedigree - Pio2737W/89I-4584A = Pio2737W//Pike/FL302.

PI 639228 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "Panola"; D99*5725. PVP 200500196. Pedigree - E87-6646/Pio2580.

PI 639229 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "Myers"; 97S2085-08. PVP 200500197. Pedigree - N96-2456/BW230 = Sinton/Stoa//Grandin/3/Sharp/AC Minto.

PI 639230 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "AP603 CL". PVP 200500198. Pedigree - Gunner 205 CL/Gunner 208 CL.

The following were developed by AgriPro Wheat, Vernon, Texas, United States. Received 05/06/2005.

PI 639231 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "Fannin". PVP 200500220. Pedigree - TX87V1613/KS91WGRC11 = TAM105/3/NE70654/Blueboy//Bobwhite sib/4/KS91WGRC11.

The following were developed by Robert Hunger, Oklahoma State University, Dept. of Plant Pathology, 110 NRC, Stillwater, Oklahoma 74078-9947, United States; Brett F. Carver, Oklahoma State University, Dept. of Plant & Soil Sciences, 368 Agriculture Hall North, Stillwater, Oklahoma 74078, United States; E.L. Smith, Oklahoma State University, Oklahoma Agr. Exp. Sta., Stillwater, Oklahoma 74078, United States; David R. Porter, USDA, ARS, 1301 N. Western Road, Stillwater, Oklahoma 74075-2714, United States; Oklahoma Agricultural Experiment Station, Stillwater, Oklahoma, United States; B.W. Seabourn, USDA, ARS, Grain Marketing and Production Research Center, Hard Winter Wheat Quality Lab., Manhattan, Kansas 66506, United States; Jeanmarie Verchot-Lubicz, Oklahoma State University, Dept. Entomology and Plant Pathology, NRC 127, Stillwater, Oklahoma 74078, United States; E.G. Krenzer, Oklahoma State University, Dept. of Plant and Soil Sciences, Stillwater, Oklahoma 74078, United States; A.R. Klatt, Oklahoma State University, Dept. of Plant and Soil Sciences, Stillwater, Oklahoma 74078, United States; B.C. Martin, Oklahoma State University, Dept. of Plant and Soil Sciences, Stillwater, Oklahoma 74078, United States; P. Rayas-Duarte, Oklahoma State University, Dept. of Biochemistry and Molecular Biology, Stillwater, Oklahoma 74078, United States; J.T. Edwards, Oklahoma State University, Dept. of Plant

and Soil Sciences, Stillwater, Oklahoma 74078, United States. Received 05/06/2005.

PI 639232. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "DELIVER"; OK98690. PVP 200500242; CV-995. Pedigree - OK91724/Karl = Yantar/2*Chisholm//Karl. Released 2004. Coleoptile length at 15C in the growth chamber measures 7.6 cm, or similar to Jagger. Juvenile plant growth is semi-erect. Flag leaves at the boot stage are blue-green, recurved, twisted, and waxy. Spikes are apically awnletted, dense, tapering, inclined, and white-glumed at harvest maturity. Heading date is intermediate and 3 days later than Jagger. First-hollow-stem stage is moderately late compared with most contemporary hard red winter wheat cultivars. Semidwarf and intermediate for plant height, averaging 85 cm in the field in Oklahoma. Based on signle-kernel characterization system (SKCS) using field-grown kernel samples, Deliver produces large kernels. Kernel wt. is 31.5 mg and kernel diameter is 2.36 mm. SKCS-kernel hardness has averaged 57 in Oklahoma. Kernel hardness patterns of Deliver reflect those of Chisholm, one of grandparents. Milling and baking performance are exceptionally good, and visual classification by USDA-GIPSA confirms its HRW status. Wheat protein averaged 12.0% in Oklahoma (12% m.b.). Straight-grade flour yield is 75.2% with 0.40% flour ash content. Mixograph mixing time relatively long at 7.0 min, and mixogram curve width is 12.8 mm at 2 min past peak. Shows resistant reactions to following diseases: wheat soilborne mosaic virus, wheat spindle-streak mosaic virus and stripe rust caused by Puccinia striiformis. Moderately resistant in adult-plant stages to Puccinia triticina, though seedling plants show a susceptible reaction to races of leaf rust currently present in southern Great Plains. Shows intermediate reaction to Septoria tritici and scab (Fusarium spp.).

The following were developed by Robert Hunger, Oklahoma State University, Dept. of Plant Pathology, 110 NRC, Stillwater, Oklahoma 74078-9947, United States; Brett F. Carver, Oklahoma State University, Dept. of Plant & Soil Sciences, 368 Agriculture Hall North, Stillwater, Oklahoma 74078, United States; E.L. Smith, Oklahoma State University, Oklahoma Agr. Exp. Sta., Stillwater, Oklahoma 74078, United States; David R. Porter, USDA, ARS, 1301 N. Western Road, Stillwater, Oklahoma 74075-2714, United States; Oklahoma Agricultural Experiment Station, Stillwater, Oklahoma, United States; B.W. Seabourn, USDA, ARS, Grain Marketing and Production Research Center, Hard Winter Wheat Quality Lab., Manhattan, Kansas 66506, United States; Jeanmarie Verchot-Lubicz, Oklahoma State University, Dept. Entomology and Plant Pathology, NRC 127, Stillwater, Oklahoma 74078, United States; E.G. Krenzer, Oklahoma State University, Dept. of Plant and Soil Sciences, Stillwater, Oklahoma 74078, United States; A.R. Klatt, Oklahoma State University, Dept. of Plant and Soil Sciences, Stillwater, Oklahoma 74078, United States; B.C. Martin, Oklahoma State University, Dept. of Plant and Soil Sciences, Stillwater, Oklahoma 74078, United States; P. Rayas-Duarte, Oklahoma State University, Dept. of Biochemistry and Molecular Biology, Stillwater, Oklahoma 74078, United States; Guihua Bai, USDA-ARS, 4008 Throckmorton Hall, Kansas State University, Manhattan, Kansas 66506, United States; J.T. Edwards, Oklahoma State University, Dept. of Plant and Soil Sciences, Stillwater, Oklahoma 74078, United States. Received 05/06/2005.

PI 639233. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "ENDURANCE"; OK94P549-11. PVP 200500243; CV-994.

Pedigree - HBY756A/Siouxland//2180. Released 2004. Moderately tall semidwarf, averaging 87 cm in the field in Oklahoma. Exceeds Jagger and 2174 in height by 3 cm. Intermediate maturity. Heading date similar to 2174 and about 3 d later than Jagger. Its first-hollow-stem stage is moderately late compared with most contemporary hard red winter wheat cultivars. Flag leaves at the boot stage are green, recurved, and twisted. Spikes are middense, tapering, awned, white-glumed, and recurved at harvest-maturity. Juvenile plant growth is semi-erect to s emi-prostrate. Coleoptile length at 15C in the growth chamber measures 7.1 cm. Based on single-kernel characterization system using field-grown kernel samples, Endurance produces moderately large kernels. Kernel weight is 29.5 mg and kernel diameter is 2.29 mm. Wheat protein has averaged 11.8% in Oklahoma (12% m.b.) Milling yield is above-average, or 74% with 0.37% flour ash. Mixograph mixing time has averaged 5 min. and mixogram curve width is 9.3 mm at 2 min past peak. Shows a relatively high tolerance level to aluminum toxicity under field conditions (pH<4.5). Moderately resistant to wheat soilborne mosaic virus. Resistant in the adult-plant stages to Puccinia graminis f. sp. tritici and to Puccinia triticina, though seedling plants s a susceptible reaction to races of leaf rust currently present int he southern Great Plains. Also resistant to Erysiphe graminis f. sp. tritici. Exhibits an intermediate reaction to Puccinia striiformis, scab (Fusarium spp.), and to barley yellow dwarf virus. Heterogeneous for the 1BL/1RS translocation, with 27% of the plants having the translocation.

The following were developed by Golden Peanut Company, LLC, Ashburn, Georgia, United States; William F. Anderson, USDA/ARS, CGBRU, P.O. Box 748, Tifton, Georgia, United States; J.E. Harvey, Golden Peanut Co., 1730 Denham Rd., Ashburn, Georgia 31714, United States. Received 05/06/2005.

PI 639234. Arachis hypogaea L.
Cultivar. Pureline. "AT-3081R". PVP 200500200; CV-81.

The following were developed by Cross Creek Seed, Inc, Raeford, North Carolina, United States. Received 05/06/2005.

PI 639235. Nicotiana tabacum L.
Cultivar. Pureline. "CC 101". PVP 200500208.

The following were developed by Cascade International Seed Company, 8483 W. Stayton Rd., Aumsville, Oregon 97325, United States. Received 05/06/2005.

PI 639236 PVPO. Dactylis glomerata L.
Cultivar. LG31. PVP 200500209.

Unknown source. Received 05/06/2005.

PI 639237 PVPO. Phaseolus vulgaris L.
Cultivar. Pureline. "Floyd". PVP 200500211. Developed in United States.

The following were developed by Syngenta Seeds, Inc. - Vegetable, Boise, Idaho, United States. Received 05/06/2005.

PI 639238 PVPO. Phaseolus vulgaris L.
Cultivar. Pureline. "Ryder". PVP 200500212.

PI 639239 PVPO. Phaseolus vulgaris L.
Cultivar. Pureline. "Topaz R". PVP 200500213.

PI 639240 PVPO. Phaseolus vulgaris L.
Cultivar. Pureline. "Redon". PVP 200500234.

The following were developed by AmeriSeed, LLC, Boise, Idaho, United States. Received 05/06/2005.

PI 639241 PVPO. Phaseolus vulgaris L.
Cultivar. Pureline. "La Paz". PVP 200500219.

The following were developed by Syngenta Seeds, Inc., Minneapolis, Minnesota, United States. Received 05/06/2005.

PI 639242 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "Coker 9436"; B970051. PVP 200500221. Pedigree - Coker 9907/IL84-3010(Caldwell/Tyler).

The following were developed by PanAmerican Seed, a division of Ball Horticultural Company, West Chicago, Illinois, United States. Received 05/06/2005.

PI 639243 PVPO. Catharanthus roseus (L.) G. Don
Cultivar. Lavender Blue 99-665. PVP 200500214.

PI 639244 PVPO. Catharanthus roseus (L.) G. Don
Cultivar. "Pacifica Cherry Halo". PVP 200500215.

PI 639245 PVPO. Catharanthus roseus (L.) G. Don
Cultivar. "Pacifica Magenta Halo". PVP 200500216.

PI 639246 PVPO. Catharanthus roseus (L.) G. Don
Cultivar. "Pacifica Orchid Halo". PVP 200500217.

PI 639247 PVPO. Catharanthus roseus (L.) G. Don
Cultivar. "Pacifica Rose Halo". PVP 200500218.

The following were developed by Blue Moon Farm LLC, Lebanon, Oregon, United States. Received 05/06/2005.

PI 639248 PVPO. Lolium perenne L.
Cultivar. "Roadster". PVP 200500235.

The following were developed by California Oils Corporation, Woodland, California, United States. Received 05/06/2005.

PI 639249 PVPO. Carthamus tinctorius L.
Cultivar. Pureline. "S-344". PVP 200500236.

The following were developed by Pybas Vegetable Seed Company, P.O. Box 868, Santa Maria, California 93456, United States. Received 05/06/2005.

PI 639250 PVPO. Lactuca sativa L.
Cultivar. Pureline. "Ambush". PVP 200500241.

The following were developed by Joe N. Corgan, College of Ag. and Home Econ., Dept. Horticulture, Box 3530, Las Cruces, New Mexico 88003, United States; Marissa Wall, USDA, ARS, PBARC, P. O. Box 4459, Hilo, Hawaii 96720, United States. Donated by Chris Cramer, New Mexico State University, Department of Agronomy and Horticulture, N346 Skeen Hall, Las Cruces, New Mexico 88003-8003, United States. Received 09/14/2004.

PI 639251. Allium cepa L. **var. cepa**
Cultivar. "NuMex BR1". Pedigree - Selected from Texas Early Grano 502 PRRGG. A yellow, short day onion, high yield, excellent bolting resistance. Bulbs are intermediate between a high top and a flat top. The necks are small, and when fully mature and field cured, the bulbs develop an attractive, thin yellow scale. Bulb firmness is similar to other Yellow Grano-type cultivars.

PI 639252. Allium cepa L. **var. cepa**
Cultivar. "NuMex Jose Fernandez". Pedigree - Maternal parents thought to be in N cytoplasm included in NuMex Fernandex are Ben Shermen, Peckham YSS, and Tucker YSS. NuMex BR1, Buffalo, and El Capitan contributed S cytoplasm. Several parents contributed genes for male sterility (ms). A yellow, intermediate variety for spring-seeding or transplanting. Maturity from seeding is about mid July. When transplanted, it matures in late June. It is highly resistant to pink root disease, and produces high yields on pink root infested soils. Bulbs are predominately medium depth globe shape, and firm. Scale color is light yellow (straw colored), similar to Sweet Spanish varieties, and only slightly darker than the grano types like NuMex BR1 or NuMex Sunlite. Necks are small. Foliage color is medium green, similar to that of most Sweet Spanish types.

PI 639253. Allium cepa L. **var. cepa**
Cultivar. "NuMex Sundial". Pedigree - Selected from Ben Shermen. A selection of 100 non-bolting bulbs was made from a planting with >90% bolting. Bulbs were selfed, leaving one umbel of each to intercross. Tests on self progeny indicated one bulb selection (7933) to be superior in bolg resistance and bulb shape. "NuMex Sundial" and "NuMex Suntop" were derived by two cycles of selection from the open-pollinated (intercross) progeny from 7933. A yellow, intermediate variety described as a "hard, tough onion". This variety resembles "Yellow Sweet Spanish" in most characteristics. Tops are large and non-glaucous. Bulbs are globe to high-globe, very hard, and have a smooth, tan scale. Bulbs are firmer than most Sweet Spanish cultivars, and matures 3-4 weeks earlier than the Utah strain of "Yellow Sweet Spanish". Its handling characteristics have generally been rated high. It has excellent tolorance to pink root disease. NuMex Sundial can be used for spring-seeding, but will produce larger bulbs if fall-seeded. From

fall-seeding, it produces excellent yields of large onions. Spring-seeded yields are somewhat less than other spring-seeded intermediates, and tends to produce small-medium sized onions.

PI 639254. *Allium cepa* L. var. *cepa*
Cultivar. "NuMex Sunlite". Pedigree - Selected from Texas Early Grano 502 PRR. The first selection was among half-sibs from bulbs selected for bolting resistance. Progency from selected half-sibs were intercrossed. Bolting-resistant bulbs from the recombination were selfed, and the progeny were screened in a field disease nursery for uniformly high levels of pink root resistance. Bulbs from resistant progeny were intercrossed to produce NuMex Sunlite. A yellow, short day onion, high yield, excellent bolting resistance. One of the best varieties available for tolerance to pink root disease. Yellow Grano type onion, very uniform size and shape. It has good firmness and adequate scale to minimize damage in handling. Plant characteristics and maturity date are similar to Texas Grano 502 PRR (its parent). Bulbs are medium deep, top-shaped, with rounded shoulders and refined neck.

PI 639255. *Allium cepa* L. var. *cepa*
Cultivar. "NuMex Suntop". Pedigree - Selected from Ben Shermen. A selection of 100 non-bolting bulbs was made from a planting with >90% bolting. Bulbs were selfed, leaving one umbel of each to intercross. Tests on self progeny indicated one bulb selection (7933) to be superior in bolg resistance and bulb shape. "NuMex Sundial" and "NuMex Suntop" were derived by two cycles of selection from the open-pollinated (intercross) progeny from 7933. A yellow, intermediate day onion with high yield, and has excellent tolorance to pink root disease. Resembles "Yellow Sweet Spanish" in most characteristics. Tops are large and non-glaucous. Bulbs are globe to high-globe, hard; and have a smooth, ta n scale. Bulbs are firmer than most Sweet Spanish cultivars. NuMex Suntop closely resembles NuMex Sundial in its production characteristics. Foliage color is slightly lighter green, and maturity is about five days later than NuMex Sundial.

The following were developed by Mel Holland, New Mexico State University, Department of Horticulture, Box 3 Q, Las Cruces, New Mexico 88003, United States; Joe N. Corgan, College of Ag. and Home Econ., Dept. Horticulture, Box 3530, Las Cruces, New Mexico 88003, United States. Donated by Chris Cramer, New Mexico State University, Department of Agronomy and Horticulture, N346 Skeen Hall, Las Cruces, New Mexico 88003-8003, United States. Received 09/14/2004.

PI 639256. *Allium cepa* L. var. *cepa*
Breeding. NM899. Pedigree - Intercrosses between Temprana and Early Supreme, Southport White Globe, New Mexico White Grano PRR, White Creole and Ringmaster. Selected progeny from each were combined (massed) within lines. A white, late short day onion. Has a moderately high bolting resistance, and is highly resistant to pink root disease. Bulbs are firm to hard with excellent color. Bulb shape is deep and variable from typical grano to globe, some are elongated globes. Yield potential and bulb size are equal to or greater than other short day white varieties. NM899 is a broad-based genetic resource of value to onion breeders for development of open pollinated varieties, and inbreds for hybrid varieties, that combine excellent color quality, PRR, and bolting resistance.

The following were developed by Joe N. Corgan, College of Ag. and Home Econ., Dept. Horticulture, Box 3530, Las Cruces, New Mexico 88003, United States; Chris Cramer, New Mexico State University, Department of Agronomy and Horticulture, N346 Skeen Hall, Las Cruces, New Mexico 88003-8003, United States. Donated by Chris Cramer, New Mexico State University, Department of Agronomy and Horticulture, N346 Skeen Hall, Las Cruces, New Mexico 88003-8003, United States. Received 09/14/2004.

PI 639257. Allium cepa L. **var. cepa**
Breeding. NM162. Pedigree - Developed by intercrossing 'NuMex Starlite', with a maintainer (B) line, followed by recurrent intercrosses between the progeny from the B line and the parent ('NuMex Starlite'). A fall-planted, short day type onion, in normal (N) cytoplasm. Excellent bolting resistance and moderate to high resistance to pink root (Phoma terrestris).

PI 639258. Allium cepa L. **var. cepa**
Breeding. NM172. Pedigree - Developed by intercrossing 'NuMex Sunlite', with a maintainer (B) line, followed by recurrent intercrosses between the progeny from the B line and the parent ('NuMex Sunlite'). A fall-planted, short day type onion, in normal (N) cytoplasm. Excellent bolting resistance and moderate to high resistance to pink root (Phoma terrestris).

The following were developed by B.B. Singh, International Institute of Tropical Agriculture, Grain Legume Improvement Program, Ibadan, Oyo, Nigeria; M.A. Toure, Cinzana Agricultural Research Station, Segou/Mali, P.O. Box 214, Sudan. Received 05/05/2005.

PI 639259. Vigna unguiculata (L.) Walp. **subsp. unguiculata**
Cultivar. Pureline. "Sangaraka"; IT89KD-245. CV-254. Pedigree - (IT87F-1777-2 x IT84S-2246-4) x IT87F-1777-2). Has a spreading growth habit, with upright peduncles and pods held over the canopy. It has medium size (16g/100 seeds), white seeds with rough seed testa. It has combined resistance to aphid and bruchid and two major species of parasitic plants. It is also resistant to major diseases like anthracnose, web blight, brown blotch, Cercospora leaf spots, Septoria leaf spot, bacterial blight), as well as cowpea yellow mosaic and cowpea aphid borne mosaic. Showed 50 to 100% superiority in grain yield compared to the local and improved cultivars used as checks. Being a medium maturing cultivar, it is harvested in 80 to 85 days, while the local cultivars reachmaturity in 100 to 120 days. The mean grain yields were 1.5 to 2 tonnes/ha and fodder yield of over 2 tons/ha in on farm-trials. Has been well appreciated when intercropped with cereals like millet and sorghum because of its high intercrop yields and its capacity to induce the suicidal germination of Striga hermonthica.

PI 639260. Vigna unguiculata (L.) Walp. **subsp. unguiculata**
Cultivar. Pureline. "Korobalen"; IT89KD-374-57. CV-253. Pedigree - (IT87F-1787-3 x IT84S-2246-4) x IT87F-1787-3). Has a semi-erect growth habit, with upright peduncles and pods held over the canopy. It has medium size (14g/100 seeds), white seeds with rough seed testa. Is resistant to aphid and the Malian strain of Striga gesnerioides. It is also resistant to major diseases like anthracnose, web blight, brown

blotch, Cercospora leaf spots, Septoria leaf spot, bacterial blight, as well as cowpea yellow mosaic and cowpea aphid borne mosaic. Yield trials in Mali showed 30 to 100% superiority in grain yield compared to the local and improved cultivars used as checks. Being an early maturing cultivar, it becomes ready for harvest in 70 to 75 days, while the local cultivars reached maturity in 100 to 120 days. The mean grain yields ranged from 1 ton to 1.5 ton/ha in on farm-trials.

The following were developed by B.B. Singh, International Institute of Tropical Agriculture, Grain Legume Improvement Program, Ibadan, Oyo, Nigeria; B. Asafo-Adjei, Crop Research Institute, Kumasi, Ghana; G. Atuahen-Amankwah, Crop Research Institute, Kumasi, Ghana. Received 05/05/2005.

PI 639261. Vigna unguiculata (L.) Walp. **subsp. unguiculata**
Cultivar. Pureline. "Asontem"; IT82E-32. CV-252. Pedigree - TKx133-16D-2 x (TVu 1190 x TVu 2616). An early maturing variety (65 to 70 days) with a semi-erect growth habit and narrow leaves. Has purple pigmentation on the joints connecting the petiole with the main stem as well as on the standard and wing petals. It has red color and medium size seed (about 15g/ 100 seeds) with a smooth seed coat. Resistant to major diseases such as anthracnose, web blight, brown blotch, Cercospora leaf spots, Septoria leaf spot, scab and bacterial blight, as well as cowpea yellow mosaic and cowpea aphid borne mosaic. Grain yield ranged from 1.1 t/ha to 2.4 t/ha which was about 200% higher than farmers varieties and about 44% higher than the best improved variety in the same maturity group.

The following were developed by B.B. Singh, International Institute of Tropical Agriculture, Grain Legume Improvement Program, Ibadan, Oyo, Nigeria; B. Asafo-Adjei, Crop Research Institute, Kumasi, Ghana. Received 05/05/2005.

PI 639262. Vigna unguiculata (L.) Walp. **subsp. unguiculata**
Cultivar. Pureline. "Bengpla"; IT83S-818. CV-251. Pedigree - {(TVx33-1J x TVu6203) xTVx33-1J) x TVx6332}. An early maturing (65days) variety with erect growth habit, medium size broad leaves and long upright peduncles. It has medium size seeds (16g/100 seeds) with smooth white shiny testa with black hilum. Has 29.75% protein and 1.91% oil. Is resistant to pod shattering and lodging, and is resistant to major diseases like anthracnose, web blight, brown blotch, Cercospora leaf spots, Septoria leaf spot, bacterial blight, as well as cowpea yellow mosaic, blackeye cowpea mosaic, southern bean mosaic and cowpea aphid borne mosaic. Has wide adaptation with about 43% higher yield than that of local check varieties. However, for optimum yields of good quality seed/grain, is recommended for cultivation in the CS (major and minor seasons), S-DF (minor season), F-ST (minor season) and Guinea and Sudan savannas (early or mid season).

PI 639263. Vigna unguiculata (L.) Walp. **subsp. unguiculata**
Cultivar. Pureline. "Ayiyi"; IT83S-728-13. CV-250. Pedigree - TVx 3236 x {(TVu 410 x SVS-32) x TVu 76}. Has a semi-erect growth habit and determinate stem termination. It has purple flowers, light green immature pods and cream coloured matured pods, which are usually carried by the long peduncles above the leaf canopy. It has medium size seed about 13g/ 100 seeds. It has a creamy white seed coat with a brown hilum and a rough texture. The variety is early maturing (67days) and is resistant to aphid, pod shattering and lodging. It is also resistant to

major diseases like anthracnose, web blight, brown blotch, Cercospora leaf spots, Septoria leaf spot, scab, bacterial blight, as well as cowpea yellow mosaic and cowpea aphid borne mosaic. The variety is best adapted to the Coastal savanna (major and minor seasons) but also dose well in the Semi-deciduous Forest (minor season), Forest-savanna Transition (minor season) and Guinea savanna zones of Ghana.

The following were developed by Jorge A. Acosta-Gallegos, National Research Institute for Forestry Agriculture, CIRNOC-INIFAP-SARAH, Bean Program, Valle de Mexico Experimental Station, Chapingo, Mexico 56230, Mexico; Jim D. Kelly, Michigan State University, Department of Crop & Soil Science, 370 Plant & Soil Sci. Bldg. MSU, East Lansing, Michigan 48824-1325, United States; Francisco J. Ibarra-Perez, National Research Institute for Forestry and Agriculture, CIRNOC-INIFAP-SARH, Valle del Guadiana Experimental Station, Durango, Durango 34000, Mexico; R. Rosales-Serna, National Research Institute for Forestry and Agriculture, Bean/Cowpea-CRSP, Durango Experimental Station, Durango, Durango CP 34000, Mexico; B. Cazares-Enriquez, National Research Institute for Forestry and Agriculture, Bean Program, Valle de Mexico Experimental Station, Chapingo, Mexico 56230, Mexico. Received 05/09/2005.

PI 639264. Phaseolus vulgaris L.
Cultivar. Pureline. "Flor de Mayo 2000". CV-249. Pedigree - RIZ30/`Flor de Mayo M38'. Averaged 40 cm in height and exhibits an indeterminate Type IIIa growth habit, with pod distribution throughout the plant canopy. Produces white blossoms and flowers 45 d after planting, although flowering is delayed at elevations above 2,300 masl in the sub-humid highlands. Is a mid-season cultivar, maturing 94 d after planting with a range in maturity from 90 to 99 d, depending on season and altitude. Carries the single dominant hypersensitive I gene for resistance to Bean Common Mosaic Virus but is sensitive to the necrosis inducing strains of Bean Common Mosaic Necrosis Virus, which induces the black root reaction. In Central Mexico, it has not exhibited field symptoms of anthracnose or rust in spite of the large number of physiological races detected in the region. Resistant to local isolates of halo blight, and is tolerant to local isolates of common bacterial blight, and root rots in the highlands. Produces a typical flor de mayo seed with a pink/purple marbled pattern on a cream background. Seed size is medium and averages 28.3 g/100 seed, ranging from 27.6 to 32.3 g/100 seed depending on location. The seed is similar in size, shape and color to common highland landraces in the flor de mayo class, but larger in size than Flor de Mayo Bajio. Average cooking time is slightly longer (66 min) than the time for Flor de Mayo Bajio (61 min), but is less than the time for Flor de Mayo M38 (71 min).

The following were developed by S. B. King, SADC/ICRISAT SMIP, P.O. Box 39063, Nairobi Area, Kenya; E. T. Gwata, ICRISAT, P. O. Box 39063, Nairobi, Kenya; S.N. Silim, ICRISAT, P.O. Box 39063, Nairobi, Kenya; J.K. Mligo, Agricultural Research Institute, Ilonga, P.O. Box 33, Kilosa, Morogoro, Tanzania; M. Siambi, ICRISAT, P.O. Box 1096, Lilongwe, Malawi; O. Karuru, ICRISAT, P.O. Box 39063, Nairobi, Kenya; P. Omanga, Catholic Relief Services, P.O. Box 49675, Nairobi, Kenya. Received 05/18/2005.

PI 639265. Cajanus cajan (L.) Millsp.
Cultivar. Pureline. "ICEAP 00040". CV-255;. Pedigree - Developed by selfing of an unimproved landrace and tested as ICEAP 00040 in field

trials. Developed by ICRISAT and released in 2003 in two countries (Malawi and Tanzania) in eastern and southern Africa (ESA). Is a late-maturing pigeonpea cultivar released for its resistance to fusarium wilt, and has potential use in the cropping systems of the semi-arid ESA region and as a source of germplasm for pigeonpea improvement programs. A unique cultivar developed by selecting a single genotype from a landrace population that was collected from Kitui (eastern Kenya). Evaluation for resistance to fusarium wilt was conducted on-station in wilt-sick plots located in Kenya and Tanzania. At Kiboko Research Station (Kenya), the mean percent wilt (%W) was 19% and 21.0% in 1999 and 2001, respectively. Similarly, at Ilonga Research Station (Tanz ania), the mean %W was 0% and 18% during 1999 and 2002, respectively. An indeterminate, compact, long-duration cultivar maturing in 170-230 d. The stem is green and attains a height of 2.5(+or-)0.6 m depending on prevailing temperatures. The branching type is compact. The flowers are yellow and are borne on short racemes. The pods are long, curved slightly, and contain 5-6 seeds. The seed is white (cream) and large (100 seed-weight = 18.0g). The yield potential is about 2.5 t/ha.

The following were developed by C. Corley Holbrook, USDA, ARS, Georgia Coastal Plain Exp. Sta., P.O. Box 748, Tifton, Georgia 31793, United States; Patricia Timper, Nematodes, Weeds & Crops, Research Unit, USDA-ARS, P.O. Box 748, Tifton, Georgia 31793, United States; William F. Anderson, USDA/ARS, CGBRU, P.O. Box 748, Tifton, Georgia, United States. Received 05/17/2005.

PI 639266. Arachis hypogaea L.
Breeding. Pureline. NR_0812; AT 0812. GP-123. Pedigree - (AT-108 X GP-NC WS 5) - 2 - 2 - 1 - 2 - 3 - 2. A runner type peanut with very high levels of resistance to the peanut root-knot nematode. Marker assisted breeding was employed to select homozygous nematode resistance in early generations. This line has resistance to M. arenaria and M. javonica comparable to the released cultivar COAN but has greater tomato-spotted wilt virus (TSWV) resistance and higher yield potential. Has semi-erect growth habit and flowers are not present on the main stem. This line belongs to A. hypogaea subspecies hypogaea var. hypogaea. Plants are small to medium in size. Main stems are not apparent at maturity. Has moderate maturity (130 -145 days from planting in South Georgia). Yielded 3940 kg/ha and 3118 kg/ha in replicated yield trials with no nematode pressure, compared to 3981 kg/ha and 4075 kg/ha for Georgia Green. Under high nematode pressure, yields were 3483 kg/ha and 2745 kg/ha and 3496 kg/ha compared to 3355 kg/ha, 3371 kg/ha, and 3451 kg/ha for Georgia Green. Yields at these same locations for the highly nematode resistant but TSWV susceptible COAN were 2781 kg/ha, 2622 kg/ha, and 2620 kg/ha. Produces thin two-seeded pods. Seed have pink seed coats and have a blocky appearance. Grade data indicated a shelling percentage of 76%, and 56 g/100 seed. The size of seed fit the medium runner grade market.

PI 639267. Arachis hypogaea L.
Breeding. Pureline. NR_0817; AT 0817. GP-124. Pedigree - (AT-108 X GP-NC WS 5) - 2 - 2 - 1 - 2 - 3 - 8. A runner type peanut with very high levels of resistance to the peanut root-knot nematode. Marker assisted breeding was employed to select homozygous nematode resistance in early generations. This line has resistance to M. arenaria and M. javonica comparable to the released cultivar COAN but has greater tomato-spotted wilt virus (TSWV) resistance and higher yield potential. Has semi-erect

growth habit and flowers are not present on the main stem. This line belongs to A. hypogaea subspecies hypogaea var. hypogaea. Plants are medium in size. Main stems are not apparent at maturity. Has moderate maturity (130 -145 days from planting in South Georgia). Yielded 3919 kg/ha and 3344 kg/ha in replicated yield trials with no nematode pressur e, compared to 3981 kg/ha and 4075 kg/ha for Georgia Green. Under high nematode pressure, the yield was 3227 kg/ha compared to 3451 kg/ha for Georgia Green. The yield for the highly nematode resistant but TSWV susceptible COAN was 2621 kg/ha. Pods contain two seed and are moderate in thickness. Seed are well formed and size comparable to the medium runner grade market. The oil chemistry indicates a middle oleic fatty acid level (3:1 oleic:linoleic).

The following were developed by Mark J. Bassett, University of Florida, Department of Vegetable Crops, 1253 Fifield Hall, Gainesville, Florida 32611, United States. Received 05/27/2005.

PI 639268. Phaseolus vulgaris L.
Genetic. Genetic Marker 114; W6 27586. Pedigree - BC2 to 5-593 from 1-218. { [g] [b] [v*lae] } or { [v] [gy] }; Seed greenish-yellow - under cool, low stress growing conditions - and a purple corona; typically variable in the extent of seed coat expressing a strong greenish-yellow, over the underlying chamois of [g][b][v*lae]. May be heterozygous at [V] for [v*lae/v] in some seed, causing segregation for 'purple corona' / 'absensce of purple corona', but will not affect the greenish-yellow over the remaining seed coat.

PI 639269. Phaseolus vulgaris L.
Genetic. Genetic Marker 115; W6 27587. Pedigree - BC3 to 5-593 from 8-163. { [t] [z*sel] [Fib] [B] [V] }; Demonstration stock for the interaction of [Fib] with [t][z*sel], or the sellatus pattern of [t][z*sel][fib] is restricted to the arcus pattern of [t][z*sel][Fib] - giving an arcus pattern of partly colored seed coat.

PI 639270. Phaseolus vulgaris L.
Genetic. Genetic Marker 116; W6 27588. Pedigree - BC4 to 5-593 from 6-226. { [t] [z] [Fib] }; Demonstration stock for the interaction of [Fib] with [t][z], or the virgarcus pattern or [t][z][fib] is restricted to the arcus pattern of [t][z][Fib] - giving an arcus pattern of partly colored seed coat.

The following were developed by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States; A.J. Palazzo, U.S. Army Cold Regions Res. and Engineering Lab., 72 Lyme Road, Hanover, New Hampshire 03755-1290, United States; Blair Waldron, USDA, ARS, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States; R. Deane Harrison, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States; T.J. Cary, U.S. Army Cold Regions Res. and Engineering Lab, 72 Lyme Road, Hanover, New Hampshire 03755-1290, United States. Received 05/25/2005.

PI 639271. Achillea millefolium L.
Breeding. Population. Yakima. GP-8. Pedigree - Wildland seed (generation G0) was collected from 27 locations representing 7 different ecological

zones at the U.S. Army Yakima Training Center (YTC) in Yakima, Washington. Approximately 2000 seedlings from the wildland-collected G0 seed, equally representing all collection sites, were started in the greenhouse and transplanted to a field near Logan, Utah. Seed was harvested from these plants and composited together to form the G1 generation. Developed and released as a source identified class germplasm by a multi-agency project to identify resilient plant characteristics and develop wear-resistant plant cultivars for use on military training lands. This is a multi-origin germplasm assembled from 27 locations to ensure establishment over a broad geographic area and provides a source of readily available seed. Has shown vigorous growth in the G1 field near Logan, Utah and has been successfully established in field trials in Utah, Idaho, and Washington. A range of phenotypic differences have been observed in the seed production field indicating the diversity within this germplasm. In a preliminary study an earlier western yarrow collection from many of the same 27 collection locations was tested at the Yakima Training Center where it established and persisted better than common variety-not-stated western yarrow. Western yarrow is an important, abundant forb in the bluebunch wheatgrass-sagebrush plant communities of the Intermountain and Northwest regions of the United States. It is rhizomatous and drought tolerant enabling it to recruit into disturbed areas and often competes well with invasive weedy species. This western yarrow is intended for use in rehabilitation and restoration of western rangelands. It should be particularly useful to help stabilize and add diversity to severely disturbed sites, such as military training lands and after wildfires.

The following were developed by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States; A.J. Palazzo, U.S. Army Cold Regions Res. and Engineering Lab., 72 Lyme Road, Hanover, New Hampshire 03755-1290, United States; Steve Larson, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States; Blair Waldron, USDA, ARS, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States; R. Deane Harrison, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States; T.J. Cary, U.S. Army Cold Regions Res. and Engineering Lab, 72 Lyme Road, Hanover, New Hampshire 03755-1290, United States. Received 05/25/2005.

PI 639272. Poa secunda J. Presl

Breeding. Population. Reliable. GP-8. Pedigree - 314 Sandberg bluegrass plants were collected from 28 locations representing 7 different ecological zones at the U.S. Army Yakima Training Center (YTC) in Yakima, Washington. The 314 plants (G0 generation) were potted, maintained in the greenhouse, and transplanted in the spring near Logan, Utah. Seed from the original 314 plants was harvested and composited, in equal amounts per collection location, to form the G1 generation. Developed and released as a selected class (natural track) germplasm as part of an inter-agency project to identify resilient plant characteristics and develop wear-resistant plant cultivars for use on military training lands. Sandberg bluegrass reproduces via facultative apomixis, theoretically resulting in fixed adaptation to specific environments. This multi-origin germplasm assembled from 28 locations, each potentially containing unique co-adapted gene complexes, to ensure establishment over a broad geographic area and provide a source of

readily available seed. It has been successfully established in several trials in Utah and Idaho and at the Dept. of Defence Yakima Training Center in Yakima, WA. It also displayed apomictic uniformity within collections, but contained a wide diversity of genotypes among collections as evidenced by a range of phenotypes in the seed increase fields. Sandberg bluegrass is an important understory grass in the bluebunch wheatgrass-sagebrush ecological sites of the Intermountain and Northwest regions of the United States. It is a medium-lived, perennial bunchgrass valuable for soil erosion control, spring livestock and wildlife grazing, and biodiversity. It resists trampling and is often one of the first species to reestablish on sites disturbed by fire, large equipment and vehicles, and animals. The intended use for this release is for rehabilitation and restoration of western rangelands. It may be particularly useful as a pioneer plant on severely disturbed sites, such as military training sites and after wildfires.

The following were developed by Richard C. Frohberg, North Dakota State University, Crop & Weed Science Department, P.O. Box 5051, Fargo, North Dakota 58105-5051, United States; J.B. Rasmussen, North Dakota State University, Dept. of Plant Pathology, Fargo, North Dakota 58105, United States; North Dakota State University Research Foundation, North Dakota, United States; R.W. Stack, North Dakota State University, Plant Pathology Department, Fargo, North Dakota 58105, United States; Mohamed Mergoum, North Dakota State University, Plant Sciences Dept., Loftsgard Hall, Fargo, North Dakota 58105-5051, United States; T.C. Olson, North Dakota State University, Dept. of Cereal Science, Fargo, North Dakota 58105, United States; Tim Friesen, USDA-ARS, 1307 N. 18th St., Fargo, North Dakota 58105, United States. Received 05/25/2005.

PI 639273. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "GLENN"; ND 747. PVP 200500280; CV-974. Pedigree - ND 2831/'Steele-ND'. Released 2005. A hard red spring wheat developed at North Dakota State University and released by the North Dakota Agricultural Experiment Station, and released because it combines very high level of resistance to Fusarium head blight (FHB) with high yield and grain volume, as well as excellent end-use quality for the domestic and export wheat markets. Grain yield is similar to Alsen, Parshall and Reeder, but lower than Steele-ND. Grain volume is 811 kg/cubic m, significantly higher than Alsen, Parshall, and Dapps. Protein content (166 g/k) is lower than Dapps but similar to Alsen, Parshall, and higher than Reeder. Flour yield is similar to Alsen, Parshall, and Reeder. Water absorption is significantly higher than Reeder, but not different from Alsen, and Parshall. The mixing tolerance is longer than all of the checks. Loaf volume is comparable to Parshall and Alsen, but superior to Reeder. The FHB incidence recorded is significantly higher than the most resistant line ND 2710; but significantly lower than the incidence for the moderately resistant checks Alsen and Steele-ND. Also exhibited a high level of resistance to the predominant race in the region of leaf and stem rust. It is medium resistant to tan spot and medium susceptible to septoria nodorum.

The following were developed by J. B. Davis, University of Idaho, Plant, Soil and Entomological Sciences, Moscow, Idaho 83844-2339, United States; L. Seip, University of Idaho, Dept. Plant, Soil and Entomological Sciences, Moscow, Idaho 83844-2339, United States; Jack Brown, University of Idaho, Dept. of

Plant, Soil and Entomological Sciences, Crop & Weed Science, Moscow, Idaho 83844-2339, United States; D.A. Brown, University of Idaho, Dept. of Plant, Soil and Entomological Sciences, Moscow, Idaho 83844-2339, United States; N. Baker, University of Idaho, Dep. Plant, Soil and Ent. Science, Moscow, Idaho 83844-2339, United States. Donated by Jack Brown, University of Idaho, Dept. of Plant, Soil and Entomological Sciences, Crop & Weed Science, Moscow, Idaho 83844-2339, United States. Received 05/27/2005.

PI 639274. Brassica napus L.
Cultivar. Pureline. "Premier"; UI.666. CV-23. Pedigree - `Westar'/`DNK.89.213'. Seed yield was medium to high and relatively consistent over a range of environments that exist throughout the Pacific Northwest region. Averaged over 59 year/sites, yield was 1785 kg/ ha, compared to Hyola.401, Sunrise, Westar and Profit with 2076 kg/ha, 1778 kg/ha, 1675 kg/ha, and 1631 kg/ha, respectively. This cultivar would not be recommended for planting in areas with less than 40 cm of annual rainfall. Oil content was not significantly different from the high oil cultivar Profit and significantly higher than Hyola.401 and Westar. It has lower linolenic acid content (35 g/kg) than Sunrise (101 g/kg). The reduction of linolenic acid results in an increase of linoleic acid (204 g/kg) and a slight increase in oleic acid (667 g/kg). Aliphatic glucosinolate content of defatted seed meal was 12.0 micromole/g, which was significantly higher than the low glucosinolate cultivar Sunrise, but within the canola standard of less than 30.0 micromoles/g. The primary aliphatic glucosinolate types were 2-hydroxy-3-butenyl glucosinolate (7.3 micromole/g) and 3-butenyl glucosinolate (4.2 micromole/g). 50% Bloom on average was reached 56 d after planting, which was 3 days later than Hyola.401 and one day earlier than Sunrise and Profit. Average plant height was 130 cm at maturity compared to 114 cm and 138 cm for Hyola.401 and Sunrise, respectively, and is resistant to lodging, and moderately resistant to spring frost. Seed cotyledons are medium in size and seedling habit is prostrate at the leaf rosette stage. Leaves are medium green and non-glaucous. Flowers and flower buds are located at the tip of the apical meristem. Flowers are bright yellow and anther dotting is absent. Bilateral single siliques have a semi-erect habit. Silique length and breadth are both medium with a short silique beak and short pedicel length. Siliques contain a high number of dark brown-black seeds.

The following were donated by Cindy Wildeus, University of Virgin Islands, Kingshill, St. Croix 008850, Virgin Islands (U.S.). Received 08/22/1989.

PI 639275. Rhynchosia minima (L.) DC.
Wild. VI 67; Grif 5578. Collected 12/1988 in St. Croix, Virgin Islands (U.S.). Udall Point, St. Croix, V.I.; roadside.

The following were collected by David Spooner, USDA, ARS, University of Wisconsin, Department of Horticulture, Madison, Wisconsin 53706-1590, United States; Ronald van den Berg, Wageningen Agricultural University, Department of Plant Taxonomy, General Foulksweg 37, Wageningen, Gelderland 6700 ED, Netherlands; William Garcia Fernandez, PROINPA (Programa de Investigacion de la Papa), IBTA (Instituto de Boliviano Tecnologia Agropecuaria), Calle Man Cesped 923, Cochabamba, Cochabamba, Bolivia; Maria Luisa Ugarte, PROINPA (Programa de Investigacion de la Papa), IBTA (Instituto de Boliviano

Technologia Agropecuaria), Calle Man Cesped 923, Cochabamba, Cochabamba, Bolivia. Donated by Roel Hoekstra, Centre for Genetic Resources the Netherlands (CGN), Wageningen University and Research Centre (WUR), P.O. Box 16, Wageningen, Gelderland NL-6700 AA, Netherlands. Received 09/13/2004.

PI 639276. Solanum soestii Hawkes & Hjert.
Wild. SFVU 6722; Q 44245-01; Q 44246-02; Q 44247-03; Q 44248-04; Q 44250-06; Q 44251-07; Q 44253-09; Q 44255-11; Q 44249-05; Q 44254-10. Collected 03/15/1993 in Cochabamba, Bolivia. Latitude 16° 56' 48" S. Longitude 67° 11' 18" W. Elevation 2819 m. Inquisivi. 6 km N of Quime. Growing on slope above road in rocky soil. Corolla white, rotate-pentagonal, 2 young conical fruits collected.

The following were donated by Shu De Lee, Chinese Academy of Agricultural Sciences, 30 Baishigiao Rd., Beijing, Beijing 100094, China. Received 05/09/1991.

PI 639277. Lablab purpureus (L.) Sweet
Grif 969.

The following were donated by Kapila Patel, Griffin, Georgia 30223, United States. Received 03/12/1992.

PI 639278. Lablab purpureus (L.) Sweet
Grif 1246. Collected in India.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 07/12/1990.

PI 639279. Lablab purpureus (L.) Sweet
Cultivated. WJK-PRC-86; W6 4544; Grif 12305. Collected 06/06/1990 in Yunnan, China. Elevation 1900 m. Market in Kunming, Yunnan Province. Brown-seeded type. Grown locally.

PI 639280. Lablab purpureus (L.) Sweet
Cultivated. WJK-PRC-87; W6 4545; Grif 12306. Collected 06/06/1990 in Yunnan, China. Elevation 1900 m. Market in Kunming, Yunnan Province. Red-seeded type. Grown locally.

The following were donated by Cindy Wildeus, University of Virgin Islands, Kingshill, St. Croix 008850, Virgin Islands (U.S.). Received 08/22/1989.

PI 639281. Leucaena leucocephala (Lam.) de Wit
VI 73; Grif 5577. Collected 1987 in St. Croix, Virgin Islands (U.S.). Bethlehem, St. Croix, V.I. Panicum maximum pastures.

The following were developed by Randall Nelson, USDA, ARS, National Soybean Research Center, University fo Illinois, Urbana, Illinois 61801, United States; Edward Johnson, USDA, ARS, National Soybean Research Laboratory, 1101

West Peabody Drive, Urbana, Illinois 61801, United States. Received 06/21/2005.

PI 639282. Glycine max (L.) Merr.
Breeding. Pureline. LG96-1797; SY 512001. GP-316. Pedigree - LG96-1797 is an F6 selection from LG89-8665 x LG89-7657. LG89-8665 is an F5 selection from PI 436682 x Ripley and LG89-7657 is an F5 selection from Ripley x PI 438206. LG96-1797 has indeterminate stem termination and is classified as late group III maturity. LG96-1797 has purple flowers, gray pubescence, brown pods, and yellow hilum and seed coat. In 1999, it was tested at 9 locations in the Uniform Preliminary Test IVB. LG96-1797 has protein (41.7%) and oil (19.1%) concentrations similar to standard cultivars. It was challenged with race 7 of Phytophthora sojae and was resistant. This is the first high yielding germplasm released in the U.S. that has either PI 436682 or PI 438206 as a progenitor. PI 436682 and PI 438206 are both yellow seeded, grain type soybeans that originated in China. Based on characterization with RAPD markers and cluster analysis, PI 436682 is in a genetic group that contains no major U.S. ancestral lines and PI 438206 is in the same genetic group as Capitol, which contributes less than 2% of the genes to the current gene pool based on pedigree analysis.

PI 639283. Glycine max (L.) Merr.
Breeding. Pureline. LG97-7012; SY 512002. GP-317. Pedigree - LG97-7012 is an F6 selection from LG89-1525 x Asgrow A3322. LG89-1525 is an F8 selection from PI 90566-1 x L74-3897 L74-3897 is an F6 selection from Williams x Beeson. LG97-7012 has indeterminate stem termination and is classified as early group III maturity. It has white flowers, gray pubescence, tan pods, yellow seed coat and buff hilum color. This is the first U.S. germplasm release that has PI 90566-1 as a progenitor. In 2002 in Uniform Test III, seeds of LG97-7012 averaged 40.9% protein and 19.4% oil. LG97-7012 has a mixed reaction to race 4 and is resistant to race 7 of Phytophthora sojae. PI 90566-1, one of the parents of LG97-7012, was imported from Jilin, China in 1930. PI 90566-1 was characterized using RAPD fragments and compared to the major ancestral lines of current U.S. cultivars. It was grouped with the ancestral lines Dunfield and Mukden that contributed 7% of the genes to current U.S. cultivars.

PI 639284. Glycine max (L.) Merr.
Breeding. Pureline. LG98-1445; SY 512003. GP-318. Pedigree - LG98-1445 is an F6 selection from LG91-7431 x Pioneer 9273. LG91-7431 is an F6 selection from LG84-1272 x Elgin. LG84-1272 is an F5 selection from PI 227333 x PI 91730-1. LG98-1445 has indeterminate stem termination and is classified as early group III maturity. It has purple flowers, tawny pubescence, brown pods, yellow seed coat and black hilum color. In testing in Uniform Test III in 2002, LG98-1445 had 40.1% protein and 20.8% oil. LG98-1445 is susceptible to races 4 and 7 of Phytophthora sojae. PI 227333 and PI 91730-1 were characterized using RAPD fragments and compared to the major ancestral lines of current U.S. cultivars. PI 227333 is in same genetic group as the ancestral line Korean. Based on pedigree analysis, Korean contributes less than 1% of genes to current U.S. cultivars. PI 91730 1 was grouped with Richland and Haberlandt. These two ancestral lines are estimated to have contributed 9% of the genes to the current U.S. soybean gene pool.

PI 639285. Glycine max (L.) Merr.
Breeding. Pureline. LG98-1605; SY 512004. GP-319. Pedigree - LG98-1605 is an F6 selection from LG88-8958 x LG89-771. LG88-8958 is an F6 selection from PI 253665D x PI 283331. LG89-771 is an F4 selection from LG85-3343 x LG85-2846. LG85-3343 is an F5 selection from PI 361064 x PI 407710. LG85-2846 is an F5 selection from PI 404157 x PI 384469A. LG98-1605 has indeterminate stem termination and is classified as late group II maturity. It has white flowers, tawny pubescence, brown pods, yellow seed coat and hilum color. In testing in the Uniform Preliminary Test IIB in 2001, seeds from LG92-1605 averaged 40% protein and 21% oil. LG98-1605 is susceptible race 4 and has a mixed reaction to race 7 of Phytophthora soja. The six exotic accessions used to develop this experimental lines have been characterized using RAPD fragments and compared to the ancestral lines of U.S. cultivars. PI 253665D, PI 404157, and PI 407710 are in same genetic group as the ancestral line Korean, which based on pedigree analysis, contributes less than 1% of genes to current U.S. cultivars. PI 361064 was grouped with the major U.S. ancestral lines S 100, Lincoln, Illini, and A.K. (Harrow) when the clustering was based on 109 RAPD fragments and 3 SSR loci but did not cluster with any U.S. ancestral lines or exotic accessions and was classified as an outlier when the clustering was based on 281 RAPD fragments. PI 283331 and PI 384469A were classified into two different genetic groups neither of which contained any of the major U.S. ancestral lines.

The following were collected by Gulnara Sitpaeva, Institute of Botany, Department of Plan Resources, Almaty, Kazakhstan; Kenebay Kozhakhmetov, Kazakhstan Research Institute of Farming, Wide Crossed and Cytology Department, Almaty, Kazakhstan. Received 11/24/2003.

PI 639286. Aegilops cylindrica Host
Wild. K2003-1; NGRL 361. Collected 07/31/2003 in Alma-Ata, Kazakhstan. Latitude 43° 8' 20" N. Longitude 76° 36' 27" E. Elevation 1157 m. Almaty province, Karasai county, Northern macroslope of Zailiyskiy Alatou mountains, Kaskelen gorge. Dry slopes. Good drainage. Bushes, cereals, grass mixtures: Rosa acicularis, Atraphaxis frutescens, Berberis heteropoda, Hordeum crinitum, Origanum vulgare, Eremusus fuscus, Er. robustus, Bromopsis inermis. Annual, up to 50 cm high, stem naked, erect, curved at point of initiation (above-ground part); leaves plain, rough on both sides; spike narrow cylindrical, 7-12 cm long, 3-4 mm wide, 6-13 spikelets.

The following were collected by Gulnara Sitpaeva, Institute of Botany, Department of Plan Resources, Almaty, Kazakhstan. Received 11/25/2003.

PI 639287. Hordeum sp.
Wild. K2003-4; Yachmen oshetinenyi; NGRL 364. Collected 06/17/2003 in Alma-Ata, Kazakhstan. Latitude 43° 8' 20" N. Longitude 76° 36' 27" E. Elevation 1157 m. Almaty province, Karasai county, Northern macroslope of Zailiyskiy Alatou mountains, Kaskelen gorge. Dry slopes. Along river bank. Stony; sandy soil; good drainage. Site vegetation: Artemisia vulgaria, Elytrigia repens, Achillea millefolium, and others. Annual, 10-20 cm high, stem curved at plant initiation; leaves narrow, linear; spike 1.5-5 cm long, solid rachis, spikelets are set in three, spikelet glumes of mid spikelet is setiferous, sp. glumes are not expanded at the base of spikelet.

The following were collected by Gulnara Sitpaeva, Institute of Botany, Department of Plan Resources, Almaty, Kazakhstan; Kenebay Kozhakhmetov, Kazakhstan Research Institute of Farming, Wide Crossed and Cytology Department, Almaty, Kazakhstan. Received 12/01/2003.

PI 639288. Avena fatua L.
Wild. K2003-7; Oves posevnoi; NGRL 366. Collected 08/01/2003 in Alma-Ata, Kazakhstan. Latitude 43° 14' 13" N. Longitude 76° 41' 14" E. Elevation 770 m. Almaty province, Karasai county, Kaskelen gorge, fields of KAZ Rif. Along the water challel. Clay soil, poor drainage. Segetal plant: Erigezon acer, Convolvulus arvense, Xanthium strumarium and other. Annual; stem, leaves and sheath are naked, tassel is branchy; spikelets - 25 mm long, spikelet glumes - up to 20 mm long with 8-9 veins, basal floral glume is lanceolate, two-dental (toothed) at the top.

PI 639289. Triticum aestivum L. **subsp. aestivum**
Landrace. K2003-8; Pschenitsa myagkaya; NGRL 367. Collected 08/01/2003 in Alma-Ata, Kazakhstan. Latitude 43° 14' 13" N. Longitude 76° 41' 14" E. Elevation 770 m. Almaty province, Karasai county, Kaskelen gorge, fields of KAZ Rif. Good drainage. Annual, 100-120 cm high, linear, long, loose, spike; spikelet glume oval, carinate. Seed 9 mm long.

PI 639290. Triticum turgidum subsp. durum (Desf.) Husn.
Landrace. K2003-9; Pschenitsa tveadaya; NGRL 368. Collected 08/01/2003 in Alma-Ata, Kazakhstan. Latitude 43° 14' 13" N. Longitude 76° 41' 14" E. Elevation 770 m. Almaty province, Karasai county, Kaskelen gorge, fields of KAZ Rif. Good drainage. Annual, stem erect, hard, hollow or filled, naked, smooth; leaf sheath naked, smooth, leaves broad-linear, spike dense, thick, solid rachis.

PI 639291. Avena sativa L.
Landrace. K2003-10; Oves posevnoi; NGRL 369. Collected 08/01/2003 in Alma-Ata, Kazakhstan. Latitude 43° 16' 24" N. Longitude 76° 41' 47" E. Elevation 748 m. Almaty province, Karasai county, Kaskelen gorge, village Jambul. Annual; stem, leaves and sheath are naked, tassel is branchy; spikelets 25 mm long, spikelet glume up to 20 mm with 8-9 veins, basal floral glume is lanceolate, with two-dental (toothed) at the top.

PI 639292. Hordeum vulgare L. **subsp. vulgare**
Landrace. K2003-12; Yachmen; NGRL 371. Collected 08/01/2003 in Alma-Ata, Kazakhstan. Latitude 43° 16' 41" N. Longitude 76° 42' 30" E. Elevation 745 m. Almaty province, Karasai county, Kaskelen gorge, village Jambul. Farm; Bulduk. Segetal plant. Good drainage. Annual; height, up to 100 cm; stem erect, smooth, sheath naked, smooth; leaves plain, 1.5 cm wide, naked, uneven; spike linear, rachis is solid; spikelet glumes linear-lanceolate.

PI 639293. Aegilops cylindrica Host
Wild. K2003-13; NGRL 372. Collected 08/01/2003 in Alma-Ata, Kazakhstan. Latitude 43° 16' 46" N. Longitude 76° 43' 1" E. Elevation 743 m. Almaty province, Karasai county, farm, Bulduh. Good drainage. Aspect green. Segetal plant: Erigeron acer, Rumex confertus, Artemisia annua, Lactuca undulata. Annual, up to 50 cm high, erect stem, curved at the

plant initiation (above-ground part), naked stem. Leaves plain, rough on both sides. Spike narrow, cylindrical, 2-12 cm long, 3-4 mm wide.

PI 639294. Aegilops cylindrica Host
Wild. K2003-15; NGRL 374. Collected 08/01/2003 in Alma-Ata, Kazakhstan. Latitude 43° 21' 14" N. Longitude 76° 50' 11" E. Elevation 691 m. Almaty province, Iliski county, village Burundai. Dry slopes; clay soil, poor drainage. Aspect yellow. Aczoptilon repens, Bromopsis inermis, Hordeum crinitum, Elytripia repens, and others. Annual; up to 45-50 sm high, erect stem, curved at the plant initiation, naked stem; leaves plain, rough on both sides, spike narrow cylindrical, 7-12 sm long, 3 mm wide.

The following were collected by Gulnara Sitpaeva, Institute of Botany, Department of Plan Resources, Almaty, Kazakhstan; Kenebay Kozhakhmetov, Kazakhstan Research Institute of Farming, Wide Crossed and Cytology Department, Almaty, Kazakhstan; M. Yessimbekova, Genetic Resources Unit, Scientific Production Center of Farming and Crop Research, Almaty, Kazakhstan. Received 12/10/2003.

PI 639295. Triticum aestivum L. **subsp. aestivum**
Landrace. K2003-32; Pschenica; NGRL 391. Collected 08/06/2003 in Alma-Ata, Kazakhstan. Latitude 44° 16' 37" N. Longitude 79° 25' 57" E. Elevation 1298 m. Almaty province, Panfilov county, Koktal-Saryosek, village Konyr-olen. Cultural field. Good drainage. Annual, 100-120 cm high, linear, long, loose, spike; spikelet glume oval, carinate; seed 9mm long.

PI 639296. Avena fatua L.
Wild. K2003-33; Oves pustoi; NGRL 392. Collected 08/06/2003 in Alma-Ata, Kazakhstan. Latitude 44° 16' 37" N. Longitude 79° 25' 57" E. Elevation 1298 m. Almaty province, Panfilov county, Koktal-Saryosek, village Konyr-olen. Good drainage. Avena fatua - segetal plant (with Triticum aestivum). Annual; height 60-120 cm; stem naked; sheath of bottom leaves pubescent, ciliated; tossel up to 30 cm long; spikelets 20-22 mm long, 2-3 flora (multiovary); awing florets, basal floral glume 25 cm long with solid cranked rachis.

PI 639297. Hordeum vulgare L. **subsp. vulgare**
Landrace. K2003-38; NGRL 396. Collected 08/06/2003 in Alma-Ata, Kazakhstan. Latitude 44° 17' 28" N. Longitude 78° 26' 13" E. Elevation 1341 m. Almaty province, Kirbulak county, village Baigazy. In 13 km Altyn-Emel mountains. Production field. Good drainage. Annual; height up to 100 cm; stem erect, smooth, sheath naked, smooth; leaves plain; 1-5 cm wide, naked, uneven spike linear, rachis solid, spikelet glumes linear-lanceolate.

PI 639298. Avena fatua L.
Wild. K2003-39; Oves posevnoi; NGRL 397. Collected 08/06/2003 in Alma-Ata, Kazakhstan. Latitude 44° 17' 28" N. Longitude 78° 26' 13" E. Elevation 1341 m. Almaty province, Kirbulak county, village Baigazy. In 13 km Altyn-Emel mountains. Cultural field. Good drainage. Annual, stem, leaves and sheath are naked, tassel is branchy; spiklets -25 mm long, spikelet glumes up to 20 mm with 8-9 veins, basal floral glume is lanceolate, with being two-dental (toothed) at the top.

PI 639299. Hordeum vulgare L. **subsp. vulgare**
Landrace. K2003-46; NGRL 404. Collected 08/07/2003 in Alma-Ata, Kazakhstan. Latitude 44° 38' 12" N. Longitude 78° 21' 47" E. Elevation 1314 m. Almaty province, Koksu county, near village Aktekshi (5-6 km). Cultural field; good drainage. Annual; height up to 100 cm; stem erect, smooth, sheath naked, smooth; leaves plain, 1-5 cm wide, naked, uneven, spike linear, rachis solid; spikelet glumes linear lanceolate.

PI 639300. Hordeum vulgare L. **subsp. vulgare**
Landrace. K2003-50; NGRL 408. Collected 08/07/2003 in Alma-Ata, Kazakhstan. Latitude 44° 39' 28" N. Longitude 78° 20' 51" E. Elevation 1239 m. South-east from Village Mukry, Almaty province, Koksy county. Cultural field; good drainage. In this field as a weed. Avena sativa. Annual; height up to 100 cm; stem erect, smooth; sheath naked, smooth; leaves plain, 1-5 cm wide, naked, uneven spike linear, rachis solid; spikelet glumes linear lanceolate.

PI 639301. Aegilops cylindrica Host
Wild. K2003-51; NGRL 409. Collected 08/07/2003 in Alma-Ata, Kazakhstan. Latitude 44° 40' 10" N. Longitude 78° 20' 46" E. Elevation 1213 m. Almaty province, Koksu county, 3-4 km from village Aktekshi. Foothill plains; good drainage. On both sides of the road. Graminae-grass mixture. Annual; height 20-50 cm; stem naked, or with rare filaments, leaf wide linear, up to 8 mm wide; spike linear, fragile, 5-13 spikelet, all spikelets are well developed; spikelet glumes at the top - obtuse, with thickening at edge, without flowering and awning.

PI 639302. Aegilops cylindrica Host
Wild. K2003-52; NGRL 410. Collected 08/07/2003 in Alma-Ata, Kazakhstan. Latitude 44° 40' 10" N. Longitude 78° 20' 46" E. Elevation 1213 m. Almaty province, Koksu county, 3-4 km from village Aktekshi. Foothill plains; good drainage. On both sides of the road. Graminae - grass mixture. Annual, up to 50 sm high, erect stem, with being curved at the plant initiolion (along ground part), naked stem; leaves plain, rough from both sides, spike narrow cylindrical, 7-12 sm long, 3-4 mm wide, 6-13 spikelets.

PI 639303. Triticum aestivum L. **subsp. aestivum**
Landrace. K2003-55; NGRL 413. Collected 08/07/2003 in Kazakhstan. Almaty province, Koksu county, near village Octyabr. Cultural field; good drainage. No info.

PI 639304. Triticum aestivum L. **subsp. aestivum**
Landrace. K2003-65; Pschenitca; NGRL 423. Collected 08/09/2003 in Kazakhstan. Latitude 47° 59' 23" N. Longitude 80° 45' 52" E. Elevation 771 m. East Kazakhstan, county Aygyz, near village Sary-arka. Cultural field; good drainage. Annual, 100 cm high, linear, long, loose, spike; spikelet glume oval, carinate, seed 9 mm long.

PI 639305. Avena fatua L.
Wild. K2003-66; Oves posevnoi; NGRL 424. Collected 08/09/2003 in Kazakhstan. Latitude 47° 59' 23" N. Longitude 80° 45' 52" E. Elevation 771 m. East Kazakhstan, county Aygyz, near village Sary-arka. Cultural field. Good drainage. Annual; stem, leaves and sheath are naked, tassel is branchy; spikelets 25 mm long, spikelet glumes up to 20 mm with 8-9 veins, basal floral glume is lanceolate, with being two-dental (toothed) at the top.

PI 639306. Triticum aestivum L. **subsp. aestivum**
Landrace. K2003-79; Pschenitca; NGRL 436. Collected 08/10/2004 in Kazakhstan. Latitude 48° 38' 40" N. Longitude 82° 5' 8" E. Elevation 557 m. East Kazakhstan, county Kokpekty, village Bigash, farmers fields. Cultural field. Chernozem soil, good drainage. Annual, 100-110 cm high, linear, long, loose, spike; spikelet glume oval, corinate, seed 9 mm long.

PI 639307. Triticum aestivum L. **subsp. aestivum**
Landrace. K2003-82; NGRL 439. Collected 08/10/2003 in Kazakhstan. Latitude 48° 39' 3" N. Longitude 82° 7' 58" E. Elevation 555 m. East Kazakhstan, county Kokpekty, 2 km site #30. Cultural field; poor drainage. Annual, 100-120 cm high, linear, long, loose, spike; spikelet glume oval, carinate, seed 9 mm long.

PI 639308. Triticum aestivum L. **subsp. aestivum**
Landrace. K2003-87; NGRL 445. Collected 08/10/2003 in Kazakhstan. Latitude 48° 46' 4" N. Longitude 82° 37' 10" E. Elevation 506 m. Kokpekty-Somarka, Kokpekty region, east Kazakhstan, near village Bolschoi Byken. Cultural field; poor drainage. Annual, 100-120 cm high, linear, long, loose, spike; spikelet glume oval, carinate, seed 9 mm long.

PI 639309. Hordeum vulgare L. **subsp. vulgare**
Landrace. K2003-91; NGRL 449. Collected 08/10/2003 in Kazakhstan. Latitude 48° 46' 4" N. Longitude 82° 37' 10" E. Elevation 506 m. Kokpekty-Samarka, Kokpekty, east Kazakhstan, near village Bolschoi-Buken. Cultural field. Good drainage. Absinth-agropyron-feathergrass. Annual; height up to 100 cm; stem erect, smooth, sheath naked, smooth; leaves plain, 1-5 cm wide, naked, uneven, spike linear, rachis is solid; spikelet glumes linear, lanceolate.

PI 639310. Triticum aestivum L. **subsp. aestivum**
Landrace. K2003-93; NGRL 451. Collected 08/10/2003 in Kazakhstan. Latitude 48° 50' 36" N. Longitude 83° 2' 5" E. Elevation 470 m. East Kazakhstan, county Kokpekty, between villages Ak-kala and ZhanaZhol. Cultural field; good drainage. In this field no segetal plant. Annual, 100-120 cm high, linear, long, loose, spike; spikelet glume oval, carinate, seed 9 mm long.

PI 639311. Triticum aestivum L. **subsp. aestivum**
Landrace. K2003-107; Pschenitca; NGRL 465. Collected 08/11/2003 in Kazakhstan. Latitude 49° 12' 55" N. Longitude 84° 33' 53" E. Elevation 440 m. East Kazakhstan, county Katon-Karagai, village Bolshoi Naryn. Cultural field; good drainage. Annual, 100-110 cm high, linear, long, loose, spike; spikelet glume oval, carindte, seed 9 mm long.

PI 639312. Triticum aestivum L. **subsp. aestivum**
Landrace. K2003-108; Pschenitca; NGRL 466. Collected 08/11/2003 in Kazakhstan. Latitude 49° 14' 32" N. Longitude 84° 42' 34" E. Elevation 450 m. East Kazakhstan, county Katon-Karagai, village Bolshoi Naryn. Field. Good drainage. Annual, 100-110 cm high, linear, long, loose, spike; spikelet glume oval, carinate, seed 9 mm long.

The following were collected by Jacob Lage, International Maize & Wheat, Improvement Center, Wheat Germplasm Bank, Mexico City, Federal District 06600, Mexico; Ken Street, ICARDA, Aleppo, Syria; Zebuniso Muminshoeva, Tajik Agricultural Academy, Tajikistan; Nicholai Dzbenko, Vavilov Institute of Russia (VIR), Forage and Range Crops, Russian Federation; Farqhot Kasymov, Tajikistan Agricultural Academy, Tajikistan; Tosh Narzulloev, Tajikistan Agricultural Academy, Tajikistan. Received 02/10/2004.

PI 639313. Aegilops triuncialis L.
Wild. ICC 136778; TJK03-2; NGRL 506. Collected 08/12/2003 in Qurghonteppa, Tajikistan. Latitude 38° 51' 33" N. Longitude 69° 57' 13" E. Elevation 1144 m. Near river 3 km outside of Komsomolobad near bridge -Kaftarguzar village. Heavily grazed site, river side with wide banks featuring perrenial grasses. Stoney soil.

PI 639314. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136782; TJK03-4; NGRL 508. Collected 08/12/2003 in Qurghonteppa, Tajikistan. Latitude 38° 52' 19" N. Longitude 70° 3' 35" E. Elevation 1264 m. On west side of river heading towards Tavildara out of Komsomolobad. Mainly harvested wheat crops on either side of road.

The following were collected by Ken Street, ICARDA, Aleppo, Syria; Zebuniso Muminshoeva, Tajik Agricultural Academy, Tajikistan; Farqhot Kasymov, Tajikistan Agricultural Academy, Tajikistan; Tosh Narzulloev, Tajikistan Agricultural Academy, Tajikistan. Received 02/24/2004.

PI 639315. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136785; TJK03-7; NGRL 511. Collected 08/12/2003 in Qurghonteppa, Tajikistan. Latitude 38° 52' 19" N. Longitude 70° 3' 35" E. Elevation 1264 m. On west side of river heading towards Tavildara out of Komsomolobad. Mainly harvested wheat crops on either side of road.

PI 639316. Aegilops triuncialis L.
Wild. ICC 136789; TJK03-8; NGRL 512. Collected 08/12/2003 in Qurghonteppa, Tajikistan. Latitude 38° 52' 19" N. Longitude 70° 3' 35" E. Elevation 1264 m. On west side of river heading towards Tavildara out of Komsomolobad. Mainly harvested wheat crops on either side of road.

PI 639317. Aegilops cylindrica Host
Wild. ICC 136790; TJK03-9; NGRL 513. Collected 08/12/2003 in Qurghonteppa, Tajikistan. Latitude 38° 52' 19" N. Longitude 70° 3' 35" E. Elevation 1264 m. On west side of river heading towards Tavildara out of Komsomolobad. Mainly harvested wheat crops on either side of road.

PI 639318. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136798; TJK03-17; NGRL 521. Collected 08/12/2003 in Qurghonteppa, Tajikistan. Latitude 38° 50' 30" N. Longitude 70° 8' 2" E. Elevation 1331 m. Cultivated field 11 km from TJK03:2 along road from Komsomolobad near Kaftarguzar village. Cultivated field, wheat, roadside.

PI 639319. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136801; TJK03-20; NGRL 524. Collected 08/12/2003 in Qurghonteppa, Tajikistan. Latitude 38° 50' 30" N. Longitude 70° 8' 2" E. Elevation 1331 m. Cultivated field 11 km from TJK03:2 along road from Komsomolobad near Kaftarguzar village. Cultivated field, wheat, roadside.

PI 639320. Hordeum bulbosum L.
Wild. Population. ICC 136805; TJK03-24; NGRL 528. Collected 08/12/2003 in Qurghonteppa, Tajikistan. Latitude 38° 47' 28" N. Longitude 70° 17' 4" E. Elevation 1331 m. Cultivated field 11 km from TJK03:2 along road from Komsomolobad near Kaftarguzar village. Cultivated field, wheat, roadside.

PI 639321. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136810; TJK03-26; NGRL 530. Collected 08/13/2003 in Qurghonteppa, Tajikistan. Latitude 38° 47' 28" N. Longitude 70° 17' 4" E. Elevation 1428 m. 13 km from service center on main rd. 4km before Childara village. Cultivated fields of Razak village. Heavily grazed by cattle. Wheat and flax fields.

PI 639322. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136824; TJK03-31; NGRL 535. Collected 08/13/2003 in Qurghonteppa, Tajikistan. Latitude 38° 47' 28" N. Longitude 70° 17' 4" E. Elevation 1428 m. 13 km from service center on main rd. 4km before Childara village. Cultivated fields of Razak village. Heavily grazed by cattle. Wheat and flax fields.

PI 639323. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136865; TJK03-36; NGRL 540. Collected 08/13/2003 in Qurghonteppa, Tajikistan. Latitude 38° 47' 28" N. Longitude 70° 17' 4" E. Elevation 1428 m. 13 km from service center on main rd. 4km before Childara village. Cultivated fields of Razak village. Heavily grazed by cattle. Wheat and flax fields.

PI 639324. Aegilops cylindrica Host
Wild. ICC 136866; TJK03-37; NGRL 541. Collected 08/13/2003 in Qurghonteppa, Tajikistan. Latitude 38° 47' 28" N. Longitude 70° 17' 4" E. Elevation 1428 m. 13 km from service center on main rd. 4km before Childara village. Cultivated fields of Razak village. Heavily grazed by cattle. Wheat and flax fields.

PI 639325. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136878; TJK03-39; NGRL 543. Collected 08/13/2003 in Qurghonteppa, Tajikistan. Latitude 38° 44' 26" N. Longitude 70° 20' 54" E. Elevation 1428 m. Close to Yosgarn Village, 10km from site 4 heading towards Childara. Well watered site, orchard, roadside, irrigatged.

PI 639326. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136884; TJK03-45; NGRL 549. Collected 08/13/2003 in Qurghonteppa, Tajikistan. Latitude 38° 43' 39" N. Longitude 70° 30' 13" E. Elevation 1537 m. 3km before Yozgun settlement traveling on main road to Tavildara. Rye field - also material collected in borders and roadside.

PI 639327. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136885; TJK03-46; NGRL 550. Collected 08/13/2003 in Qurghonteppa, Tajikistan. Latitude 38° 43' 39" N. Longitude 70° 30' 13"

E. Elevation 1537 m. 3km before Yozgun settlement traveling on main road to Tavildara. Rye field - also material collected in borders and roadside.

PI 639328. Secale cereale L. **subsp. cereale**
Landrace. ICC 136886; TJK03-47; NGRL 551. Collected 08/13/2003 in Qurghonteppa, Tajikistan. Latitude 38° 43' 39" N. Longitude 70° 30' 13" E. Elevation 1537 m. 3km before Yozgun settlement traveling on main road to Tavildara. Rye field - also material collected in borders and roadside.

PI 639329. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 136889; TJK03-50; NGRL 554. Collected 08/14/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 40' 17" N. Longitude 70° 44' 16" E. Elevation 2549 m. Around rest point - village called Safedoron just before Khaburobod mountain pass. Natural grasland cut for forage.

PI 639330. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136896; TJK03-57; NGRL 561. Collected 08/14/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 29' 20" N. Longitude 70° 59' 10" E. Elevation 1343 m. 3 km after Jorf village heading towards Shipat township. Old terraced fields, featuring old fruit tree relatives - harvested wheat.

PI 639331. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136897; TJK03-58; NGRL 562. Collected 08/14/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 29' 20" N. Longitude 70° 59' 10" E. Elevation 1343 m. 3 km after Jorf village heading towards Shipat township. Old terraced fields, featuring old fruit tree relatives - harvested wheat.

PI 639332. Aegilops cylindrica Host
Wild. ICC 136899; TJK03-59; NGRL 563. Collected 08/14/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 29' 20" N. Longitude 70° 59' 10" E. Elevation 1343 m. 3 km after Jorf village heading towards Shipat township. Old terraced fields, featuring old fruit tree relatives - harvested wheat.

PI 639333. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136904; TJK03-64; NGRL 568. Collected 08/14/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 18' 58" N. Longitude 71° 16' 18" E. Elevation 1999 m. Village Votkhoud - 24km after Kurghovad village on main rd to Korog. Farmers wheat field very weedy - recently cut.

PI 639334. Secale cereale L. **subsp. cereale**
Landrace. ICC 136908; TJK03-68; NGRL 572. Collected 08/15/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 51' 15" N. Longitude 71° 35' 27" E. Elevation 1999 m. Village Pastkuf just after Rushan heading towards Kharog. Market material came from the village of Gunt which is within 20km of Kharog.

PI 639335. Avena fatua L.
Wild. ICC 136915; TJK03-75; NGRL 579. Collected 08/15/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 51' 15" N. Longitude 71° 35' 27" E. Elevation 1999 m. Village Pastkuf just after Rushan heading towards Kharog. Market material came from the village of Gunt which is within 20km of Kharog.

PI 639336. Secale cereale L. **subsp. cereale**
Landrace. ICC 136923; TJK03-83; NGRL 587. Collected 08/16/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 34' 50" N. Longitude 71° 43' 41" E. Elevation 2339 m. 4km after site 15 on road to Kharog from Dushanbe. Cultivated mixture of Rye and food and forage legumes. Irrigated.

PI 639337. Secale cereale L. **subsp. cereale**
Landrace. ICC 136939; TJK03-89; NGRL 593. Collected 08/16/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 39' 40" N. Longitude 71° 49' 4" E. Elevation 2634 m. Small village - 15 km after site 16 travelling from Kharog to Vir. Small village -backyard gardens and small wheat/rye fields. Irrigated.

PI 639338. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136930; TJK03-90; NGRL 594. Collected 08/16/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 39' 40" N. Longitude 71° 49' 4" E. Elevation 2634 m. Small village - 15 km after site 16 travelling from Kharog to Vir. Small village -backyard gardens and small wheat/rye fields. Irrigated.

PI 639339. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136931; TJK03-91; NGRL 595. Collected 08/16/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 39' 40" N. Longitude 71° 49' 4" E. Elevation 2634 m. Small village - 15 km after site 16 travelling from Kharog to Vir. Small village -backyard gardens and small wheat/rye fields. Irrigated.

PI 639340. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136933; TJK03-93; NGRL 597. Collected 08/16/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 39' 40" N. Longitude 71° 49' 4" E. Elevation 2634 m. Small village - 15 km after site 16 travelling from Kharog to Vir. Small village -backyard gardens and small wheat/rye fields. Irrigated.

PI 639341. Avena fatua L.
Wild. ICC 136935; TJK03-96; NGRL 600. Collected 08/16/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 39' 40" N. Longitude 71° 49' 4" E. Elevation 2634 m. Small village - 15 km after site 16 travelling from Kharog to Vir. Small village -backyard gardens and small wheat/rye fields. Irrigated.

PI 639342. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136939; TJK03-100; NGRL 604. Collected 08/16/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 44' 31" N. Longitude 72° 8' 13" E. Elevation 2634 m. Jabedah village 38 km from site 17 on road to Vir out of Kharog. Small settlement on the opposite side of a small river. Irrigated wheat field and garden.

PI 639343. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 136940; TJK03-101; NGRL 605. Collected 08/16/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 44' 31" N. Longitude 72° 8' 13" E. Elevation 2634 m. Jabedah village 38 km from site 17 on road to Vir out of Kharog. Small settlement on the opposite side of a small river. Irrigated wheat field and garden.

PI 639344. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 136944; TJK03-105; NGRL 609. Collected 08/16/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 42' 25" N. Longitude 72° 18' 50" E. Elevation 3108 m. Varkhoud area - Pish village 20km on from Jabedah village (site 18) heading NE towards. Irrigated mixed pea and barley fields.

PI 639345. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 136947; TJK03-108; NGRL 612. Collected 08/17/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 45' 4" N. Longitude 73° 15' 8" E. Elevation 3850 m. Village Alichul - on rd to Kyrgyz border. Small cultivated barley and rye field next to village house.

PI 639346. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 136951; TJK03-112; NGRL 616. Collected 08/17/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 7' 21" N. Longitude 72° 43' 36" E. Elevation 3371 m. 7km on from site 23 heading towards Lyangar. Cultivated field 300m up from roadside.

PI 639347. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 136953; TJK03-114; NGRL 618. Collected 08/17/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 6' 49" N. Longitude 72° 43' 43" E. Elevation 3131 m. 1.1 km from site 24. 300m down eastern side of the mountain from road. Khasvurg village. Cultivated fields 300m down from roadside. Irrigated.

PI 639348. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136955; TJK03-116; NGRL 620. Collected 08/17/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 6' 49" N. Longitude 72° 43' 43" E. Elevation 3131 m. 1.1 km from site 24. 300m down eastern side of the mountain from road. Khasvurg village. Cultivated fields 300m down from roadside. Irrigated.

PI 639349. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136962; TJK03-123; NGRL 626. Collected 08/18/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 4' 3" N. Longitude 72° 41' 41" E. Elevation 2858 m. 1km SW of Lyangar village on field overlooing Piange river. Mixed cereal, food and forage legume field.

PI 639350. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136963; TJK03-124; NGRL 627. Collected 08/18/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 4' 3" N. Longitude 72° 41' 41" E. Elevation 2858 m. 1km SW of Lyangar village on field overlooing Piange river. Mixed cereal, food and forage legume field.

PI 639351. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 136964; TJK03-125; NGRL 628. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 4' 3" N. Longitude 72° 41' 41" E. Elevation 2858 m. 1km SW of Lyangar village on field overlooing Piange river. Mixed cereal, food and forage legume field.

PI 639352. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136965; TJK03-126; NGRL 629. Collected 08/18/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 4' 3" N. Longitude 72° 41' 41" E. Elevation 2858 m. 1km SW of Lyangar village on field overlooing Piange river. Mixed cereal, food and forage legume field.

PI 639353. Secale cereale L. **subsp. cereale**
Landrace. ICC 136966; TJK03-127; NGRL 630. Collected 08/18/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 4' 3" N. Longitude 72° 41' 41" E. Elevation 2858 m. 1km SW of Lyangar village on field overlooing Piange river. Mixed cereal, food and forage legume field.

PI 639354. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136967; TJK03-128; NGRL 631. Collected 08/18/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 4' 3" N. Longitude 72° 41' 41" E. Elevation 2858 m. 1km SW of Lyangar village on field overlooing Piange river. Mixed cereal, food and forage legume field.

PI 639355. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136968; TJK03-129; NGRL 632. Collected 08/18/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 4' 3" N. Longitude 72° 41' 41" E. Elevation 2858 m. 1km SW of Lyangar village on field overlooing Piange river. Mixed cereal, food and forage legume field.

PI 639356. Secale cereale L. **subsp. cereale**
Landrace. ICC 136975; TJK03-136; NGRL 639. Collected 08/18/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 58' 14" N. Longitude 72° 17' 32" E. Elevation 2770 m. Fields of Yamchoun village 23 km sw of site 27. Irrigated mixed cereal, food and forage legume fields.

PI 639357. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 136976; TJK03-137; NGRL 640. Collected 08/18/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 58' 14" N. Longitude 72° 17' 32" E. Elevation 2770 m. Fields of Yamchoun village 23 km sw of site 27. Irrigated mixed cereal, food and forage legume fields.

PI 639358. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136978; TJK03-139; NGRL 642. Collected 08/18/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 58' 14" N. Longitude 72° 17' 32" E. Elevation 2770 m. Fields of Yamchoun village 23 km sw of site 27. Irrigated mixed cereal, food and forage legume fields.

PI 639359. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136979; TJK03-140; NGRL 643. Collected 08/18/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 58' 14" N. Longitude 72° 17' 32" E. Elevation 2770 m. Fields of Yamchoun village 23 km sw of site 27. Irrigated mixed cereal, food and forage legume fields.

PI 639360. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136980; TJK03-141; NGRL 644. Collected 08/18/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 58' 14" N. Longitude 72° 17' 32" E. Elevation 2770 m. Fields of Yamchoun village 23 km sw of site 27. Irrigated mixed cereal, food and forage legume fields.

PI 639361. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136987; TJK03-148; NGRL 651. Collected 08/18/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 40' 48" N. Longitude 71° 45' 8" E. Elevation 2745 m. Fields of Darrshai village 34 km from Yamchoun village heading towards Ishkashim. Irrigated mixed cereal, food and forage legume fields.

PI 639362. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136988; TJK03-149; NGRL 652. Collected 08/18/2003 in

Badakhshoni Kuhi, Tajikistan. Latitude 36° 40' 48" N. Longitude 71° 45' 8" E. Elevation 2745 m. Fields of Darrshai village 34 km from Yamchoun village heading towards Ishkashim. Irrigated mixed cereal, food and forage legume fields.

PI 639363. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136989; TJK03-150; NGRL 653. Collected 08/18/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 40' 48" N. Longitude 71° 45' 8" E. Elevation 2745 m. Fields of Darrshai village 34 km from Yamchoun village heading towards Ishkashim. Irrigated mixed cereal, food and forage legume fields.

PI 639364. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136990; TJK03-151; NGRL 654. Collected 08/18/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 40' 48" N. Longitude 71° 45' 8" E. Elevation 2745 m. Fields of Darrshai village 34 km from Yamchoun village heading towards Ishkashim. Irrigated mixed cereal, food and forage legume fields.

PI 639365. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 136991; TJK03-152; NGRL 655. Collected 08/18/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 40' 48" N. Longitude 71° 45' 8" E. Elevation 2745 m. Fields of Darrshai village 34 km from Yamchoun village heading towards Ishkashim. Irrigated mixed cereal, food and forage legume fields.

PI 639366. Secale cereale L. **subsp. cereale**
Landrace. ICC 136993; TJK03-154; NGRL 657. Collected 08/18/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 40' 48" N. Longitude 71° 45' 8" E. Elevation 2745 m. Fields of Darrshai village 34 km from Yamchoun village heading towards Ishkashim. Irrigated mixed cereal, food and forage legume fields.

PI 639367. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 136994; TJK03-155; NGRL 658. Collected 08/18/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 40' 48" N. Longitude 71° 45' 8" E. Elevation 2745 m. Fields of Darrshai village 34 km from Yamchoun village heading towards Ishkashim. Irrigated mixed cereal, food and forage legume fields.

PI 639368. Avena fatua L.
Wild. ICC 136996; TJK03-157; NGRL 660. Collected 08/18/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 40' 48" N. Longitude 71° 45' 8" E. Elevation 2745 m. Fields of Darrshai village 34 km from Yamchoun village heading towards Ishkashim. Irrigated mixed cereal, food and forage legume fields.

PI 639369. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137002; TJK03-163; NGRL 666. Collected 08/19/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 47' 6" N. Longitude 71° 47' 7" E. Elevation 2486 m. 10 km NW of Ishkashim on road to Kharog. Fields on west side of road. Irrigated mixed cereal, food and forage legume fields.

PI 639370. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137003; TJK03-164; NGRL 667. Collected 08/19/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 47' 6" N. Longitude

71° 47' 7" E. Elevation 2486 m. 10 km NW of Ishkashim on road to Kharog. Fields on west side of road. Irrigated mixed cereal, food and forage legume fields.

PI 639371. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 137004; TJK03-165; NGRL 668. Collected 08/19/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 47' 6" N. Longitude 71° 47' 7" E. Elevation 2486 m. 10 km NW of Ishkashim on road to Kharog. Fields on west side of road. Irrigated mixed cereal, food and forage legume fields.

PI 639372. Secale cereale L. **subsp. cereale**
Landrace. ICC 137005; TJK03-166; NGRL 669. Collected 08/19/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 47' 6" N. Longitude 71° 47' 7" E. Elevation 2486 m. 10 km NW of Ishkashim on road to Kharog. Fields on west side of road. Irrigated mixed cereal, food and forage legume fields.

PI 639373. Avena fatua L.
Wild. ICC 137009; TJK03-170; NGRL 673. Collected 08/19/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 47' 6" N. Longitude 71° 47' 7" E. Elevation 2486 m. 10 km NW of Ishkashim on road to Kharog. Fields on west side of road. Irrigated mixed cereal, food and forage legume fields.

PI 639374. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 138011; TJK03-172; NGRL 675. Collected 08/19/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 53' 20" N. Longitude 71° 31' 26" E. Elevation 2486 m. 13km from site 30 - heading northwest from Ishkashin to Kharog. Backyard field of isolated village house. Irrigated wheat fields. Weedy.

PI 639375. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137012; TJK03-173; NGRL 676. Collected 08/19/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 53' 20" N. Longitude 71° 31' 26" E. Elevation 2486 m. 13km from site 30 - heading northwest from Ishkashin to Kharog. Backyard field of isolated village house. Irrigated wheat fields. Weedy.

PI 639376. Secale cereale L. **subsp. cereale**
Landrace. ICC 137013; TJK03-174; NGRL 677. Collected 08/19/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 59' 55" N. Longitude 71° 28' 14" E. Elevation 2486 m. 16km NorthWest of site 31 on road from Ishkashim to Kharog. Mixed cereal legume fields on eastern side of road. Weedy. Irrigated.

PI 639377. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137022; TJK03-183; NGRL 686. Collected 08/19/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 8' 56" N. Longitude 71° 27' E. Elevation 2331 m. Fields of Sist village - 30 km from site 32 traveling NW to Kharog from Ishkashin. Semi terraced mixed cereal fields - heavy Melilotus sp weeds.

PI 639378. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137023; TJK03-184; NGRL 687. Collected 08/19/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 8' 56" N. Longitude 71° 27' E. Elevation 2331 m. Fields of Sist village - 30 km from

site 32 traveling NW to Kharog from Ishkashin. Semi terraced mixed cereal fields - heavy Melilotus sp weeds.

PI 639379. Secale cereale L. **subsp. cereale**
Landrace. ICC 137024; TJK03-185; NGRL 688. Collected 08/19/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 8' 56" N. Longitude 71° 27' E. Elevation 2331 m. Fields of Sist village - 30 km from site 32 traveling NW to Kharog from Ishkashin. Semi terraced mixed cereal fields - heavy Melilotus sp weeds.

PI 639380. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137028; TJK03-189; NGRL 692. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 26' 26" N. Longitude 71° 36' 30" E. Elevation 2218 m. 24 km out of Khorog along the Gunt river valley on south east side of river. Shord Village. Cultivated small farm fields - cereal and legume crops.

PI 639381. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137029; TJK03-190; NGRL 693. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 26' 26" N. Longitude 71° 36' 30" E. Elevation 2218 m. 24 km out of Khorog along the Gunt river valley on south east side of river. Shord Village. Cultivated small farm fields - cereal and legume crops.

PI 639382. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137030; TJK03-191; NGRL 694. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 26' 26" N. Longitude 71° 36' 30" E. Elevation 2218 m. 24 km out of Khorog along the Gunt river valley on south east side of river. Shord Village. Cultivated small farm fields - cereal and legume crops.

PI 639383. Secale cereale L. **subsp. cereale**
Landrace. ICC 137031; TJK03-192; NGRL 695. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 26' 26" N. Longitude 71° 36' 30" E. Elevation 2218 m. 24 km out of Khorog along the Gunt river valley on south east side of river. Shord Village. Cultivated small farm fields - cereal and legume crops.

PI 639384. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137035; TJK03-193; NGRL 696. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 26' 26" N. Longitude 71° 36' 30" E. Elevation 2218 m. 24 km out of Khorog along the Gunt river valley on south east side of river. Shord Village. Cultivated small farm fields - cereal and legume crops.

PI 639385. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137034; TJK03-194; NGRL 697. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 26' 26" N. Longitude 71° 36' 30" E. Elevation 2218 m. 24 km out of Khorog along the Gunt river valley on south east side of river. Shord Village. Cultivated small farm fields - cereal and legume crops.

PI 639386. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137033; TJK03-195; NGRL 698. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 26' 26" N. Longitude 71° 36' 30" E. Elevation 2218 m. 24 km out of Khorog along the Gunt

river valley on south east side of river. Shord Village. Cultivated small farm fields - cereal and legume crops.

PI 639387. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137032; TJK03-196; NGRL 699. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 26' 26" N. Longitude 71° 36' 30" E. Elevation 2218 m. 24 km out of Khorog along the Gunt river valley on south east side of river. Shord Village. Cultivated small farm fields - cereal and legume crops.

PI 639388. Avena fatua L.
Wild. ICC 137038; TJK03-199; NGRL 702. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 26' 26" N. Longitude 71° 36' 30" E. Elevation 2218 m. 24 km out of Khorog along the Gunt river valley on south east side of river. Shord Village. Cultivated small farm fields - cereal and legume crops.

PI 639389. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137027; TJK03-200; NGRL 703. Collected 08/19/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 36° 59' 55" N. Longitude 71° 28' 14" E. Elevation 2486 m. 16km NorthWest of site 31 on road from Ishkashim to Kharog. Mixed cereal legume fields on eastern side of road. Weedy. Irrigated.

PI 639390. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137046; TJK03-209; NGRL 712. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 19' 12" N. Longitude 71° 44' 42" E. Elevation 2594 m. 17 km south of site 35 in Zanints village in Gunt river valley on rd to Roshkaala. Mixed cereal and legume field.

PI 639391. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137047; TJK03-210; NGRL 713. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 19' 12" N. Longitude 71° 44' 42" E. Elevation 2594 m. 17 km south of site 35 in Zanints village in Gunt river valley on rd to Roshkaala. Mixed cereal and legume field.

PI 639392. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137048; TJK03-211; NGRL 714. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 19' 12" N. Longitude 71° 44' 42" E. Elevation 2594 m. 17 km south of site 35 in Zanints village in Gunt river valley on rd to Roshkaala. Mixed cereal and legume field.

PI 639393. Secale cereale L. **subsp. cereale**
Landrace. ICC 137049; TJK03-212; NGRL 715. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 19' 12" N. Longitude 71° 44' 42" E. Elevation 2594 m. 17 km south of site 35 in Zanints village in Gunt river valley on rd to Roshkaala. Mixed cereal and legume field.

PI 639394. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137055; TJK03-218; NGRL 721. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 13' 7" N. Longitude 71° 49' 57" E. Elevation 2731 m. 6km out of Roshgaala on west side of Gunt river traveling south west. Mixed barley and pea and wheat and rye fields.

PI 639395. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 137058; TJK03-221; NGRL 724. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 13' 7" N. Longitude 71° 49' 57" E. Elevation 2731 m. 6km out of Roshgaala on west side of Gunt river traveling south west. Mixed barley and pea and wheat and rye fields.

PI 639396. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 137060; TJK03-223; NGRL 726. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 12' 39" N. Longitude 72° 2' 39" E. Elevation 2893 m. Sizhd village - 30km on from Roshkaala - travelling up the Gunt river valley. Irrigated cereal fields - mixture of cultivars and species. Hull-less.

PI 639397. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137062; TJK03-225; NGRL 728. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 12' 39" N. Longitude 72° 2' 39" E. Elevation 2893 m. Sizhd village - 30km on from Roshkaala - travelling up the Gunt river valley. Irrigated cereal fields - mixture of cultivars and species.

PI 639398. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137063; TJK03-226; NGRL 729. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 12' 39" N. Longitude 72° 2' 39" E. Elevation 2893 m. Sizhd village - 30km on from Roshkaala - travelling up the Gunt river valley. Irrigated cereal fields - mixture of cultivars and species.

PI 639399. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137064; TJK03-227; NGRL 730. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 12' 39" N. Longitude 72° 2' 39" E. Elevation 2893 m. Sizhd village - 30km on from Roshkaala - travelling up the Gunt river valley. Irrigated cereal fields - mixture of cultivars and species.

PI 639400. Avena fatua L.
Wild. ICC 137065; TJK03-228; NGRL 731. Collected 08/20/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 12' 39" N. Longitude 72° 2' 39" E. Elevation 2893 m. Sizhd village - 30km on from Roshkaala - travelling up the Gunt river valley. Irrigated cereal fields - mixture of cultivars and species.

PI 639401. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137071; TJK03-234; NGRL 737. Collected 08/03/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 40' 57" N. Longitude 71° 32' 9" E. Elevation 2892 m. 25 km out of Kharog on main rd to Dushanbe. Fields on west side of road. Small farm fields featuring mixed cereals and mixed legume fields.

PI 639402. Secale cereale L. **subsp. cereale**
Landrace. ICC 137074; TJK03-237; NGRL 740. Collected 08/21/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 40' 57" N. Longitude 71° 32' 9" E. Elevation 2892 m. 25 km out of Kharog on main rd to Dushanbe. Fields on west side of road. Small farm fields featuring mixed cereals and mixed legume fields.

PI 639403. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 137086; TJK03-249; NGRL 752. Collected 08/03/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 58' 12" N. Longitude 71° 38' 1" E. Elevation 2030 m. Shoujund village 5km from turn-off from mainDushane road up the Vartung river valley. Village fields - mixed crops.

PI 639404. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 137096; TJK03-259; NGRL 762. Collected 08/21/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 0' 16" N. Longitude 71° 39' 52" E. Elevation 2020 m. 30 km up the Vartung river valley from the main Dushanbe - Kharog road. Yemtz village. Small irrigated village fields. Mixed cereals and legume fields.

PI 639405. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137097; TJK03-260; NGRL 763. Collected 08/21/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 0' 16" N. Longitude 71° 39' 52" E. Elevation 2020 m. 30 km up the Vartung river valley from the main Dushanbe - Kharog road. Yemtz village. Small irrigated village fields. Mixed cereals and legume fields.

PI 639406. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 137099; TJK03-262; NGRL 765. Collected 08/21/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 0' 16" N. Longitude 71° 39' 52" E. Elevation 2020 m. 30 km up the Vartung river valley from the main Dushanbe - Kharog road. Yemtz village. Small irrigated village fields. Mixed cereals and legume fields.

PI 639407. Avena fatua L.
Wild. ICC 137104; TJK03-266; NGRL 769. Collected 08/21/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 0' 16" N. Longitude 71° 39' 52" E. Elevation 2020 m. 30 km up the Vartung river valley from the main Dushanbe - Kharog road. Yemtz village. Small irrigated village fields. Mixed cereals and legume fields.

PI 639408. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137117; TJK03-280; NGRL 783. Collected 08/22/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 2' 7" N. Longitude 71° 51' 49" E. Elevation 2071 m. Dasht village 37 km up Vartung river valley from main road turnoff. Small village fields - mixed cereals and legume weedy.

PI 639409. Secale cereale L. **subsp. cereale**
Landrace. ICC 137118; TJK03-281; NGRL 784. Collected 08/22/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 2' 7" N. Longitude 71° 51' 49" E. Elevation 2071 m. Dasht village 37 km up Vartung river valley from main road turnoff. Small village fields - mixed cereals and legume weedy.

PI 639410. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137119; TJK03-282; NGRL 785. Collected 08/22/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 2' 7" N. Longitude 71° 51' 49" E. Elevation 2071 m. Dasht village 37 km up Vartung river valley from main road turnoff. Small village fields - mixed cereals and legume weedy.

PI 639411. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137120; TJK03-283; NGRL 786. Collected 08/22/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 2' 7" N. Longitude 71° 51' 49" E. Elevation 2071 m. Dasht village 37 km up Vartung river valley from main road turnoff. Small village fields - mixed cereals and legume weedy.

PI 639412. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 137121; TJK03-284; NGRL 787. Collected 08/22/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 2' 7" N. Longitude 71° 51' 49" E. Elevation 2071 m. Dasht village 37 km up Vartung river valley from main road turnoff. Small village fields - mixed cereals and legume weedy.

PI 639413. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137122; TJK03-285; NGRL 788. Collected 08/22/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 2' 7" N. Longitude 71° 51' 49" E. Elevation 2071 m. Dasht village 37 km up Vartung river valley from main road turnoff. Small village fields - mixed cereals and legume weedy.

PI 639414. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137123; TJK03-286; NGRL 789. Collected 08/22/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 2' 7" N. Longitude 71° 51' 49" E. Elevation 2071 m. Dasht village 37 km up Vartung river valley from main road turnoff. Small village fields - mixed cereals and legume weedy.

PI 639415. Avena fatua L.
Wild. ICC 137128; TJK03-291; NGRL 794. Collected 08/22/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 2' 7" N. Longitude 71° 51' 49" E. Elevation 2071 m. Dasht village 37 km up Vartung river valley from main road turnoff. Small village fields - mixed cereals and legume weedy.

PI 639416. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137132; TJK03-295; NGRL 798. Collected 08/22/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 59' 29" N. Longitude 71° 42' 18" E. Elevation 2061 m. 15 km in from Main Kharog - Dushanbe main road up Vartung valley. Baghou village. Cultivated village fields - weedy and mixed fields.

PI 639417. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137133; TJK03-296; NGRL 799. Collected 08/22/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 59' 29" N. Longitude 71° 42' 18" E. Elevation 2061 m. 15 km in from Main Kharog - Dushanbe main road up Vartung valley. Baghou village. Cultivated village fields - weedy and mixed fields.

PI 639418. Secale cereale L. **subsp. cereale**
Landrace. ICC 137134; TJK03-297; NGRL 800. Collected 08/22/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 37° 59' 29" N. Longitude 71° 42' 18" E. Elevation 2061 m. 15 km in from Main Kharog - Dushanbe main road up Vartung valley. Baghou village. Cultivated village fields - weedy and mixed fields.

PI 639419. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137142; TJK03-305; NGRL 808. Collected 08/23/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 11' 14" N. Longitude 71° 26' 17" E. Elevation 1639 m. Mortraven Village 7 km after turnoff up the Yazgulem river valley. Village fields - weedy and mixed.

PI 639420. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137143; TJK03-306; NGRL 809. Collected 08/23/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 11' 14" N. Longitude 71° 26' 17" E. Elevation 1639 m. Mortraven Village 7 km after turnoff up the Yazgulem river valley. Village fields - weedy and mixed.

PI 639421. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137145; TJK03-308; NGRL 811. Collected 08/23/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 11' 14" N. Longitude 71° 26' 17" E. Elevation 1639 m. Mortraven Village 7 km after turnoff up the Yazgulem river valley. Village fields - weedy and mixed.

PI 639422. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 137146; TJK03-309; NGRL 812. Collected 08/23/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 11' 14" N. Longitude 71° 26' 17" E. Elevation 1639 m. Mortraven Village 7 km after turnoff up the Yazgulem river valley. Village fields - weedy and mixed.

PI 639423. Avena fatua L.
Wild. ICC 137147; TJK03-310; NGRL 813. Collected 08/23/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 11' 14" N. Longitude 71° 26' 17" E. Elevation 1639 m. Mortraven Village 7 km after turnoff up the Yazgulem river valley. Village fields - weedy and mixed.

PI 639424. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137148; TJK03-311; NGRL 814. Collected 08/23/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 11' 14" N. Longitude 71° 26' 17" E. Elevation 1639 m. Mortraven Village 7 km after turnoff up the Yazgulem river valley. Village fields - weedy and mixed.

PI 639425. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 137157; TJK03-320; NGRL 823. Collected 08/23/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 13' 33" N. Longitude 71° 30' 24" E. Elevation 1648 m. Khanefg village 16 km from main road turn off up Yasgulem river valley. Small weedy village fields. Mixed crops.

PI 639426. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137158; TJK03-321; NGRL 824. Collected 08/23/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 13' 33" N. Longitude 71° 30' 24" E. Elevation 1648 m. Khanefg village 16 km from main road turn off up Yasgulem river valley. Small weedy village fields. Mixed crops.

PI 639427. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137160; TJK03-323; NGRL 826. Collected 08/23/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 13' 33" N. Longitude 71° 30' 24" E. Elevation 1648 m. Khanefg village 16 km from main road turn off up Yasgulem river valley. Small weedy village fields. Mixed crops.

PI 639428. Secale cereale L. **subsp. cereale**
Landrace. ICC 137161; TJK03-324; NGRL 827. Collected 08/23/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 13' 33" N. Longitude 71° 30' 24" E. Elevation 1648 m. Khanefg village 16 km from main road turn off up Yasgulem river valley. Small weedy village fields. Mixed crops.

PI 639429. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137162; TJK03-325; NGRL 828. Collected 08/23/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 13' 33" N. Longitude 71° 30' 24" E. Elevation 1648 m. Khanefg village 16 km from main road turn off up Yasgulem river valley. Small weedy village fields. Mixed crops.

PI 639430. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137174; TJK03-337; NGRL 840. Collected 08/23/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 14' 1" N. Longitude 71° 32' 51" E. Elevation 1648 m. Andarback village 20 km up Yasgulem river valley from main road turnoff. Most material from threshing floor or harvested material.

PI 639431. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137175; TJK03-338; NGRL 841. Collected 08/23/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 14' 1" N. Longitude 71° 32' 51" E. Elevation 1648 m. Andarback village 20 km up Yasgulem river valley from main road turnoff. Most material from threshing floor or harvested material.

PI 639432. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137178; TJK03-341; NGRL 844. Collected 08/23/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 14' 1" N. Longitude 71° 32' 51" E. Elevation 1648 m. Andarback village 20 km up Yasgulem river valley from main road turnoff. Most material from threshing floor or harvested material.

PI 639433. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137180; TJK03-343; NGRL 846. Collected 08/23/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 19' 47" N. Longitude 71° 24' 13" E. Elevation 1558 m. Pansahunbe Obod village 9km from main road check point up Vanch river valley. Material from threshing floor or drying stacks.

PI 639434. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 137186; TJK03-349; NGRL 852. Collected 08/24/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 20' 44" N. Longitude 71° 25' 7" E. Elevation 1648 m. 11 km up the Vanch river valley on the left bank of river in riverbed. Cultivated fields in river bed.

PI 639435. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137188; TJK03-351; NGRL 854. Collected 08/24/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 20' 44" N. Longitude 71° 25' 7" E. Elevation 1648 m. 11 km up the Vanch river valley on the left bank of river in riverbed. Cultivated fields in river bed.

PI 639436. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137189; TJK03-352; NGRL 855. Collected 08/24/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 20' 44" N. Longitude

71° 25' 7" E. Elevation 1648 m. 11 km up the Vanch river valley on the left bank of river in riverbed. Cultivated fields in river bed.

PI 639437. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137199; TJK03-362; NGRL 865. Collected 08/24/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 25' 13" N. Longitude 71° 32' 14" E. Elevation 1674 m. Bounai village on right bank of Vanch river 26 km up valley from main road turnoff. Small weedy village fields.

PI 639438. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137200; TJK03-363; NGRL 866. Collected 08/24/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 25' 13" N. Longitude 71° 32' 14" E. Elevation 1674 m. Bounai village on right bank of Vanch river 26 km up valley from main road turnoff. Small weedy village fields.

PI 639439. Secale cereale L. **subsp. cereale**
Landrace. ICC 137204; TJK03-367; NGRL 870. Collected 08/24/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 27' 12" N. Longitude 71° 36' 43" E. Elevation 1647 m. Yovid village 34.6 km up the Vanch river valley from main road turnoff. Small village fields - weedy mixed crops.

PI 639440. Avena sativa L.
Landrace. ICC 137205; TJK03-368; NGRL 871. Collected 08/24/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 27' 12" N. Longitude 71° 36' 43" E. Elevation 1647 m. Yovid village 34.6 km up the Vanch river valley from main road turnoff. Small village fields - weedy mixed crops.

PI 639441. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137206; TJK03-369; NGRL 872. Collected 08/24/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 27' 12" N. Longitude 71° 36' 43" E. Elevation 1647 m. Yovid village 34.6 km up the Vanch river valley from main road turnoff. Small village fields - weedy mixed crops.

PI 639442. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137207; TJK03-370; NGRL 873. Collected 08/24/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 27' 12" N. Longitude 71° 36' 43" E. Elevation 1647 m. Yovid village 34.6 km up the Vanch river valley from main road turnoff. Small village fields - weedy mixed crops.

PI 639443. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137208; TJK03-371; NGRL 874. Collected 08/24/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 27' 12" N. Longitude 71° 36' 43" E. Elevation 1647 m. Yovid village 34.6 km up the Vanch river valley from main road turnoff. Small village fields - weedy mixed crops.

PI 639444. Hordeum vulgare L. **subsp. vulgare**
Landrace. ICC 137213; TJK03-376; NGRL 879. Collected 08/24/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 27' 12" N. Longitude 71° 36' 43" E. Elevation 1647 m. Yovid village 34.6 km up the Vanch river valley from main road turnoff. Small village fields - weedy mixed crops.

PI 639445. Triticum aestivum L. **subsp. aestivum**
Landrace. ICC 137217; TJK03-377; NGRL 880. Collected 08/24/2003 in Badakhshoni Kuhi, Tajikistan. Latitude 38° 22' N. Longitude 71° 26' 57" E. Elevation 1674 m. Rokhov village 9km from Syroga village travelling back towards main road down Vanch valley. Village cereal fields – harvested.

The following were developed by Barbara J. Read, Agricultural Research Institute, Wagga Wagga, New South Wales, Australia. Donated by Michael C. Mackay, Australian Winter Cereals Collection, Private Mail Bag, RMB 944, Calala Lane, Tamworth, New South Wales 2340, Australia. Received 06/21/2004.

PI 639446. Hordeum vulgare L. **subsp. vulgare**
Cultivar. Pureline. "MALEBO"; AUS 400181; WWB 858; NSGC 9407. Pedigree - outcross derivative of CPI 11083, Pallidum, WWB18.

The following were collected by Gulnara Sitpaeva, Institute of Botany, Department of Plan Resources, Almaty, Kazakhstan; Kenebay Kozhakhmetov, Kazakhstan Research Institute of Farming, Wide Crossed and Cytology Department, Almaty, Kazakhstan. Received 12/01/2003.

PI 639447. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-145; "ALTAISKAYA 325"; NSGC 9408. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 48° 33' 53" N. Longitude 83° 38' E. Elevation 412 m. Kurchum Variety Testing Station, East Kazakhstan. Pedigree - Lutescens 38/Zhigulevskaya.

PI 639448. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-147; "KARAGANDINSKAYA 21"; NSGC 9409. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 48° 33' 53" N. Longitude 83° 38' E. Elevation 412 m. Kurchum Variety Testing Station, East Kazakhstan.

PI 639449. Hordeum vulgare L. **subsp. vulgare**
Cultivar. Pureline. K2003-148; "TSELINNAYA 91"; NSGC 9410. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 48° 33' 53" N. Longitude 83° 38' E. Elevation 412 m. Kurchum Variety Testing Station, East Kazakhstan.

PI 639450. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-150; "ALTAISKAYA STEPNAYA"; NSGC 9412. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 48° 33' 53" N. Longitude 83° 38' E. Elevation 412 m. Kurchum Variety Testing Station, East Kazakhstan. Pedigree - Lutescens 148/Tselinnaya 60.

PI 639451. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-151; "SAMAL"; NSGC 9413. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 48° 33' 53" N. Longitude 83° 38' E. Elevation 412 m. Kurchum Variety Testing Station, East Kazakhstan.

PI 639452. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-152; "ZHENIS"; NSGC 9414. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 48° 33' 53" N. Longitude 83° 38' E. Elevation 412 m. Kurchum Variety Testing Station, East Kazakhstan.

PI 639453. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-153; "KUTULUKSKAYA"; NSGC 9415. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 48° 33'

53" N. Longitude 83° 38' E. Elevation 412 m. Kurchum Variety Testing Station, East Kazakhstan. Pedigree - Saratovskaya 29//N911(Lee/Unrra).

PI 639454. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-154; "DAUYL"; NSGC 9416. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 48° 33' 53" N. Longitude 83° 38' E. Elevation 412 m. Kurchum Variety Testing Station, East Kazakhstan.

PI 639455. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-155; "ALTAISKAYA 100"; NSGC 9417. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 48° 33' 53" N. Longitude 83° 38' E. Elevation 412 m. Kurchum Variety Testing Station, East Kazakhstan. Pedigree - Botanischeskaya 2/Zhnitsa.

PI 639456. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-156; "LUTESCENS 521"; NSGC 9418. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 48° 33' 53" N. Longitude 83° 38' E. Elevation 412 m. Kurchum Variety Testing Station, East Kazakhstan. Pedigree - Buryatskaya 79/Mironovskaya-Yarovaya.

PI 639457. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-157; "KONTEGIRSKAYA"; NSGC 9419. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 48° 33' 53" N. Longitude 83° 38' E. Elevation 412 m. Kurchum Variety Testing Station, East Kazakhstan.

PI 639458. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-158; "KARABALYKSKAYA 92"; NSGC 9420. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 48° 33' 53" N. Longitude 83° 38' E. Elevation 412 m. Kurchum Variety Testing Station, East Kazakhstan. Pedigree - Shortandinskaya 25/Lutescens 6829.

PI 639459. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-159; "AVANGARD"; NSGC 9421. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 48° 33' 53" N. Longitude 83° 38' E. Elevation 412 m. Kurchum Variety Testing Station, East Kazakhstan.

PI 639460. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-160; "VERA"; NSGC 9422. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 48° 33' 53" N. Longitude 83° 38' E. Elevation 412 m. Kurchum Variety Testing Station, East Kazakhstan. Pedigree - Bezostaya 1/Saratovskaya 29.

PI 639461. Hordeum vulgare L. **subsp. vulgare**
Cultivar. Pureline. K2003-161; "ASTANA 200"; NSGC 9423. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 48° 33' 53" N. Longitude 83° 38' E. Elevation 412 m. Kurchum Variety Testing Station, East Kazakhstan.

PI 639462. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-162; "TSELINNAYA"; NSGC 9424. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 48° 33' 53" N. Longitude 83° 38' E. Elevation 412 m. Kurchum Variety Testing

Station, East Kazakhstan. Pedigree - selection from Dzhetygarinskii Raion landrace.

PI 639463. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-163; "AKMOLA 40"; NSGC 9425. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 48° 33' 53" N. Longitude 83° 38' E. Elevation 412 m. Kurchum Variety Testing Station, East Kazakhstan.

PI 639464. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-164; "LUTESCENS 7/87A"; NSGC 9426. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture.

PI 639465. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-165; "SIBIRSKAYA 122"; NSGC 9427. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture.

PI 639466. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-166; "SIBIRSKAYA 119"; NSGC 9428. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture.

PI 639467. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-167; "OMSKAYA 28"; NSGC 9429. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture. Pedigree - Omskaya 12/Spontannyi-Gibrid.

PI 639468. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-168; "LUTESCENS 300/89-45"; NSGC 9430. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture.

PI 639469. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-169; "DOSTYK"; NSGC 9431. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture.

PI 639470. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-171; "SIBINKA"; NSGC 9432. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture. Pedigree - PPG125/LAN.

PI 639471. Triticum turgidum subsp. durum (Desf.) Husn.
Cultivar. Pureline. K2003-172; "OMSKAYA YANTARNAYA"; NSGC 9433. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East

Kazakhstan Research Institute of Agriculture. Pedigree - Hordeiforme EK-27-1-1/Hordeiforme ZL-35-2.

PI 639472. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-173; "OMSKAYA 33"; NSGC 9434. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture. Pedigree - Lutescens 137-87-39/Omskaya 28.

PI 639473. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-174; "OMSKAYA 29"; NSGC 9435. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture. Pedigree - Lutescens 204-80-1/Lutescens 99-80-1.

PI 639474. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-175; "OMSKAYA 31"; NSGC 9436. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture.

PI 639475. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-176; "OMSKAYA 24"; NSGC 9437. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture. Pedigree - Lutescens 1594/Krasnodarskaya 39.

PI 639476. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-177; "OMSKAYA 17"; NSGC 9438. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture. Pedigree - Mironovskaya 808/Saratovskaya 29//Red River 68.

PI 639477. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-178; "ULBINKA 25 TYPICHNAYA"; NSGC 9439. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture. Pedigree - selection from Ulbinka 25.

PI 639478. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-179; "ULBINKA 25"; NSGC 9440. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture. Pedigree - Albidum 43/Mironovskaya 264//Saratovskaya 29.

PI 639479. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-180; "KORUND"; NSGC 9441. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture. Pedigree - Kharkovskaya 909/Oviachic 65.

PI 639480. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-181; "KARAND 70"; NSGC 9442. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture.

PI 639481. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-182; "ANDROGEN 2R3-2"; NSGC 9443. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture.

PI 639482. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-183; "ALTAI"; NSGC 9444. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture.

PI 639483. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-184; "ALTAISKAYA 98"; NSGC 9445. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture. Pedigree - Erythrospermum 70/Lutescens 25.

PI 639484. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-185; "ALTAISKAYA 60"; NSGC 9446. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture. Pedigree - Lutescens 17/Zhigulevskaya.

PI 639485. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-186; "ALTAISKAYA 92"; NSGC 9447. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture. Pedigree - Novosibirskaya 67/Lutescens 4029. Released 1995.

PI 639486. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-187; "ALTAISKAYA 50"; NSGC 9448. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture. Pedigree - Awnless 609 (Can)/Skala//Saratovskaya 46.

PI 639487. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-188; "TSELINNAYA 26"; NSGC 9449. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture. Pedigree - Shortandinskaya 25/FKN25.

PI 639488. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-189; "BAGRATIONOVSKAYA"; NSGC 9450. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan

Research Institute of Agriculture. Pedigree - selection from Mironovskaya-Yubileinaya.

PI 639489. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-190; "BULAVA"; NSGC 9451. Developed in Russian Federation. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture. Pedigree - PPG186/Kavkaz.

PI 639490. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-192; "KUTUMSKAYA"; NSGC 9453. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture.

PI 639491. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-193; "KOMSOMOLSKAYA 56"; NSGC 9454. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture. Pedigree - Erythrospermum 3388/Mironovskaya 10.

PI 639492. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-195; "LUTESCENS 720/556/84"; NSGC 9456. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture.

PI 639493. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-196; "LUTESCENS 308/89"; NSGC 9457. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture.

PI 639494. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-197; "LUTESCENS 88/28"; NSGC 9458. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture.

PI 639495. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. K2003-198; "LUTESCENS 767/165"; NSGC 9459. Developed in Kazakhstan. Collected 2003 in Kazakhstan. Latitude 50° 2' 12" N. Longitude 82° 31' 49" E. Elevation 305 m. East Kazakhstan Research Institute of Agriculture.

The following were developed by Lynn W. Gallagher, University of California, Department of Plant Sciences, One Shields Ave., Davis, California 95616, United States; Lee F. Jackson, University of California, Department of Plant Sciences, One Shields Avenue, Davis, California 95616-8780, United States; H.E. Vogt, University of California, Department of Plant Sciences, Davis, California 95616, United States. Received 06/20/2005.

PI 639496. Hordeum vulgare L. **subsp. vulgare**
Cultivar. Pureline. "ISHI"; UC 1047; NSGC 9522. CV-324. Pedigree - UC 828/UC 960. Released 2005. Six-rowed feed barley. In grain yield tests

(10 trials) in the San Joaquin Valley, it averaged 6,804 kg ha -1, which was 9% more than `UC 933' and 12.4% more than `UC 937'. In the Sacramento Valley (10 trials), Ishi averaged 7,272 kg ha-1, which was 5.5% more than UC 933 and 12.6% more than UC 937. In rainfed environments (12 trials), Ishi averaged 3,134 kg ha-1, which was 91% of UC 933 and was similar to UC 937, indicating no advantage for It in low rainfall, dryland situations. Ishi has the sdw1 gene and is short statured, averaging 84.6 cm, and is similar to UC 937 and 3.6 cm taller than UC 933, averaged over 32 location-years in Central Valley and Central Coast environments. For lodging resistance it averaged 2.5 (4-14%) on a scale of 1 to 10 and was superior to UC 937 but similar to UC 933 over 20 environments where lodging occurred. For days to heading it averaged 4 days earlier than UC 937 and 3 days later than UC 933, but all three cultivars were similar for time to maturity. Times for heading and maturity were noted only at UC Davis (5 environments). Ishi is moderately resistant to Barley yellow dwarf virus, leaf rust (caused by Puccinia hordei Otth.), powdery mildew [caused by Erysiphe graminis DC. f. sp. hordei Esm. Marchal; syn. Blumeria graminis (DC.) E. O. Speer], net blotch (caused by Pyrenophora teres Drechs.) and scald [caused by Rhynchosporium secalis (Oudem.) J.J. Davis]. Ishi is resistant to pathotypes of stripe rust (caused by Puccinia striiformis Westend. f. sp. hordei) existing in the Central Valley of California as a result of the transmission of resistance from UC 960. It is heterogeneous for rough and smooth awns having less than one-percent smooth awned plants. The spike is waxy and semi-erect. Kernel weight averaged about 46.5 mg over 13 environments and was about one mg. more than that observed for UC 933 and about one mg. less than for UC 937. Test weights (31 location-years) for UC 1047 averaged 62.8 kg hL-1 and.

The following were developed by Linda M. Pollak, USDA, ARS, Iowa State University, Dept. of Agronomy, Ames, Iowa 50011, United States; M. M. Goodman, North Carolina State University, Crop Sciences, Statistics, Genetics, and Botany, Raleigh, North Carolina 27695-7620, United States; Marty Carson, USDA/ARS, North Carolina State University, Plant Pathology Department, Raleigh, North Carolina 27695-7616, United States; Susan Duvick, USDA, ARS, Germplasm Enhancement of Maize, Iowa State University, Ames, Iowa 50011, United States; USDA, ARS, Germplasm Enhancement of Maize, Iowa State University, Ames, Iowa 50011, United States; Mike Blanco, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States; Peter Balint-Kurti, USDA-ARS, Department of Plant Pathology, Raleigh, North Carolina 27695-7616, United States; Mark J. Millard, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States; Randy Holley, Pioneer Hi-Bred International, Inc., Research - Inbred Discovery, DuPont Agriculture & Nutrition, Princeton, Indiana 47670, United States; J. Hudyncia, USDA-ARS, North Carolina State University, Dept. of Plant Pathology, Raleigh, North Carolina 27695-7616, United States. Donated by Marty Carson, USDA/ARS, North Carolina State University, Plant Pathology Department, Raleigh, North Carolina 27695-7616, United States. Received 10/22/2001.

PI 639497. Zea mays L. **subsp. mays**

Breeding. Partinbred. PE001n16F2S2-44; GEMS-0033; GEMN-0033; Ames 26438. GP-501. Pedigree - PE001 x N16 Cr1-B-44-B-B-B. Brazilian population PE1 (also known as BR51403 and PI 583911) was crossed to GEM line N16, a privately-owned inbred line of the non-stiff stalk heterotic group. Germplasms were developed by selfing and selecting variable F1s from

tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing and selection season in Homestead, Florida (F2S1). 990 F2S1 progenies were tested for per-se yield in trials at the Sandhills Research Station in North Carolina in 1996. The top ten percent were selected for further selfing and topcrossing in a winter nursery in Homestead, Florida. All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields extremely well in the southern US in topcrosses to stiff stalk testers compared to elite hybrid checks. The kernels are yellow in color and semident in texture. It has good per se grey leaf spot resistance.

PI 639498. Zea mays L. **subsp. mays**
Breeding. Partinbred. PE001n16F2S2-172; GEMS-0035; GEMN-0035; Ames 26440. GP-502. Pedigree - PE001 x N16 Cr1-B-172-B-B-B. Brazilian population PE1 (also known as BR51403 and PI 583911) was crossed to GEM line N16, a privately-owned inbred line of the non-stiff stalk heterotic group. Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing and selection season in Homestead, Florida (F2S1). 990 F2S1 progenies were tested for per-se yield in trials at the Sandhills Research Station in North Carolina in 1996. The top ten percent were selected for further selfing and topcrossing in a winter nursery in Homestead, Florida. All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields extremely well in the southern US in topcrosses to stiff stalk testers compared to elite hybrid checks. The kernels are yellow cap in color and semiflint in texture. It has good per se grey leaf spot resistance.

PI 639499. Zea mays L. **subsp. mays**
Breeding. Partinbred. PE001n16F2S2-176; GEMS-0036; GEMN-0036; Ames 26441. GP-503. Pedigree - PE001 x N16 Cr1-B-176-B-B-B. Brazilian population PE1 (also known as BR51403 and PI 583911) was crossed to GEM line N16, a privately-owned inbred line of the non-stiff stalk heterotic group. Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing and selection season in Homestead, Florida (F2S1). 990 F2S1 progenies were tested for per-se yield in trials at the Sandhills Research Station in North Carolina in 1996. The top ten percent were selected for further selfing and topcrossing in a winter nursery in Homestead, Florida. All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to stiff stalk testers compared to elite hybrid checks. The kernels are yellow, yellow cap in color and semiflint to semident in texture. Flowers within a few days of B73 in the South Atlantic region of the USA.

PI 639500. Zea mays L. **subsp. mays**
Breeding. Partinbred. PE001n16F2S2-181; GEMS-0037; GEMN-0037; Ames 26442. GP-504. Pedigree - PE001 x N16 Cr1-B-181-B-B-B. Brazilian population PE1 (also known as BR51403 and PI 583911) was crossed to GEM line N16, a privately-owned inbred line of the non-stiff stalk heterotic group. Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing and selection season in Homestead, Florida (F2S1). 990 F2S1 progenies were tested for per-se yield in trials at the Sandhills Research Station in North Carolina in 1996. The top ten percent were selected for further selfing and topcrossing in a winter nursery in Homestead, Florida. All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to stiff stalk testers compared to elite hybrid checks. The kernels are orange-red in color and semident in texture. It has good per se grey leaf spot resistance.

PI 639501. Zea mays L. **subsp. mays**
Breeding. Partinbred. PE001n16F2S2-239; GEMS-0039; GEMN-0039; Ames 26444. GP-505. Pedigree - PE001 x N16 Cr1-B-239-B-B-B. Brazilian population PE1 (also known as BR51403 and PI 583911) was crossed to GEM line N16, a privately-owned inbred line of the non-stiff stalk heterotic group. Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing and selection season in Homestead, Florida (F2S1). 990 F2S1 progenies were tested for per-se yield in trials at the Sandhills Research Station in North Carolina in 1996. The top ten percent were selected for further selfing and topcrossing in a winter nursery in Homestead, Florida. All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to stiff stalk testers compared to elite hybrid checks. The kernels are yellow in color and semident in texture. Flowers within a few days of B73 in the South Atlantic region of the USA.

PI 639502. Zea mays L. **subsp. mays**
Breeding. Partinbred. PE001n16F2S2-431; GEMS-0040; GEMN-0040; Ames 26445. GP-506. Pedigree - PE001 x N16 Cr1-B-431-B-B-B. Brazilian population PE1 (also known as BR51403 and PI 583911) was crossed to GEM line N16, a privately-owned inbred line of the non-stiff stalk heterotic group. Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing and selection season in Homestead, Florida (F2S1). 990 F2S1 progenies were tested for per-se yield in trials at the Sandhills Research Station in North Carolina in 1996. The top ten percent were selected for further selfing and topcrossing in a winter nursery in Homestead, Florida. All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm

yields well in the southern US in topcrosses to stiff stalk testers compared to elite hybrid checks. The kernels are orange-red to yellow in color and semiflint to semident in texture. Flowers within a few days of B73 in the South Atlantic region of the USA.

PI 639503. Zea mays L. **subsp. mays**
Breeding. Partinbred. PE001n16F2S2-521; GEMS-0041; GEMN-0041; Ames 26446. GP-507. Pedigree - PE001 x N16 Cr1-B-521-B-B-B. Brazilian population PE1 (also known as BR51403 and PI 583911) was crossed to GEM line N16, a privately-owned inbred line of the non-stiff stalk heterotic group. Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing and selection season in Homestead, Florida (F2S1). 990 F2S1 progenies were tested for per-se yield in trials at the Sandhills Research Station in North Carolina in 1996. The top ten percent were selected for further selfing and topcrossing in a winter nursery in Homestead, Florida. All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields well in the southern US in topcrosses to stiff stalk testers compared to elite hybrid checks. The kernels are yellow in color and semident in texture.

PI 639504. Zea mays L. **subsp. mays**
Breeding. Partinbred. PE001n16F2S2-705; GEMS-0042; GEMN-0042; Ames 26447. GP-508. Pedigree - PE001 x N16 Cr1-B-705-B-B-B. Brazilian population PE1 (also known as BR51403 and PI 583911) was crossed to GEM line N16, a privately-owned inbred line of the non-stiff stalk heterotic group. Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing and selection season in Homestead, Florida (F2S1). 990 F2S1 progenies were tested for per-se yield in trials at the Sandhills Research Station in North Carolina in 1996. The top ten percent were selected for further selfing and topcrossing in a winter nursery in Homestead, Florida. All procedures were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields extremely well in the southern US in topcrosses to stiff stalk testers compared to elite hybrid checks. The kernels are yellow, yellow cap in color and semiflint to semident in texture.

PI 639505. Zea mays L. **subsp. mays**
Breeding. Partinbred. PE001n16F2S2-857; GEMS-0043; GEMN-0043; Ames 26448. GP-509. Pedigree - PE001 x N16 Cr1-B-857-B-B-B. Brazilian population PE1 (also known as BR51403 and PI 583911) was crossed to GEM line N16, a privately-owned inbred line of the non-stiff stalk heterotic group. Germplasms were developed by selfing and selecting variable F1s from tropical-source x US inbred crosses in North Carolina under standard nursery conditions, followed by a second selfing and selection season in Homestead, Florida (F2S1). 990 F2S1 progenies were tested for per-se yield in trials at the Sandhills Research Station in North Carolina in 1996. The top ten percent were selected for further selfing and topcrossing in a winter nursery in Homestead, Florida. All procedures

were carried out using ear-to-row methods, except that F2 seeds planted in Homestead were bulked by pedigree. Germplasms were selected on the basis of resistance to lodging, early flowering, synchrony of silk and pollen production, and reduced plant and ear height. This germplasm yields extremely well in the southern US in topcrosses to stiff stalk testers compared to elite hybrid checks. The kernels are yellow in color and semident in texture.

The following were developed by Virginia Tech Intellectual Properties, Inc., Virginia, United States. Received 06/06/2005.

PI 639506 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "MPV 57"; VA97W-24. PVP 200500266. Pedigree - FFR555W/VA89-22-52.

PI 639507 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "Rachel"; VA98W-817. PVP 200500264. Pedigree - VA91-54-343//KS90WGRC10/VA91-52-33.

The following were developed by Commonwealth Scientific and Industrial Research Organization, Division of Plant Industry, General Post Office Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Received 06/06/2005.

PI 639508 PVPO. Gossypium hirsutum L.
FM 989B2R. PVP 200500107.

PI 639509 PVPO. Gossypium hirsutum L.
FM 991B2R. PVP 200500108.

PI 639510 PVPO. Gossypium hirsutum L.
FM 960B2R. PVP 200500109.

PI 639511 PVPO. Gossypium hirsutum L.
FM 800B2R. PVP 200500110.

The following were developed by Pioneer Hi-Bred International, Inc., Plainview, Texas 79072, United States. Received 06/06/2005.

PI 639512 PVPO. Sorghum bicolor (L.) Moench **subsp. bicolor**
PHBNPOQBIE. PVP 200500237.

PI 639513 PVPO. Sorghum bicolor (L.) Moench **subsp. bicolor**
PHB2WPYJI. PVP 200500238.

PI 639514 PVPO. Sorghum bicolor (L.) Moench **subsp. bicolor**
PHKXUJVKE. PVP 200500239.

The following were developed by J.C. Robinson Seed Company, United States. Received 06/06/2005.

PI 639515 PVPO. Zea mays L.
H60071. PVP 200500246.

PI 639516 PVPO. Zea mays L.
H60231. PVP 200500247.

PI 639517 PVPO. Zea mays L.
N61211. PVP 200500248.

PI 639518 PVPO. Zea mays L.
N69391. PVP 200500249.

PI 639519 PVPO. Zea mays L.
S32431. PVP 200500250.

The following were developed by Enza Zaden Beheer B.V., Netherlands. Received 06/06/2005.

PI 639520 PVPO. Lactuca sativa L.
Cultivar. "Bergam's Green". PVP 200500262.

PI 639521 PVPO. Lactuca sativa L.
Cultivar. "Topicana". PVP 200500261.

The following were developed by Walter W. Robertson, Shippenville, Pennsylvania, United States. Received 06/06/2005.

PI 639522 PVPO. Tripsacum dactyloides (L.) L.
Dewald. PVP 200500263.

The following were developed by Syngenta Seeds, Inc. - Vegetable, Boise, Idaho, United States. Received 06/06/2005.

PI 639523 PVPO. Phaseolus vulgaris L.
Cultivar. Pureline. "Embassy". PVP 200500259.

The following were developed by Pro-Seeds Marketing, Inc., Seaboard Seed Co., Smith Seed Services, United States. Received 06/06/2005.

PI 639524 PVPO. Lolium perenne L.
"Sun Kissed". PVP 200500244.

The following were developed by Pure Seed Testing, Inc., P.O. Box 449, Hubbard, Oregon 97032, United States. Received 06/06/2005.

PI 639525 PVPO. Poa pratensis L.
Blue-tastic. PVP 200500245.

The following were developed by Pybas Vegetable Seed Company, P.O. Box 868, Santa Maria, California 93456, United States. Received 06/06/2005.

PI 639526 PVPO. Apium graveolens L.
"Mission". PVP 200500251.

The following were donated by Irina Seferova, N.I. Vavilov Institute for Plant Industry, 44 B. Morskaya Street, Leguminous Crops Genetic Resources Department, St. Petersburg, Leningrad 190000, Russian Federation. Received 06/28/2005.

PI 639527. Glycine max (L.) Merr.
Landrace. VIR 140; SY 513001. Collected 1923 in Uzbekistan.

PI 639528. Glycine max (L.) Merr.
Landrace. VIR 233; SY 513002. Collected 1923 in Primorye, Russian Federation.

PI 639528 A. Glycine max (L.) Merr.
Landrace. VIR 233; SY 513002. Collected 1923 in Primorye, Russian Federation.

PI 639528 B. Glycine max (L.) Merr.
Landrace. VIR 233; SY 513002. Collected 1923 in Primorye, Russian Federation.

PI 639528 C. Glycine max (L.) Merr.
Landrace. VIR 233; SY 513002. Collected 1923 in Primorye, Russian Federation.

PI 639529. Glycine max (L.) Merr.
Landrace. VIR 245; SY 513003. Collected 1923 in Yevrey, Russian Federation.

PI 639530. Glycine max (L.) Merr.
Landrace. VIR 250; SY 513004. Collected 1923.

PI 639531. Glycine max (L.) Merr.
Landrace. VIR 253; SY 513005. Collected 1923 in Primorye, Russian Federation.

PI 639532. Glycine max (L.) Merr.
Landrace. VIR 576; SY 513006. Collected 1925 in Primorye, Russian Federation.

PI 639533. Glycine max (L.) Merr.
Landrace. VIR 611; SY 513007. Collected 1927 in Primorye, Russian Federation.

PI 639534. Glycine max (L.) Merr.
Landrace. VIR 986; SY 513008. Collected 1929 in Primorye, Russian Federation.

PI 639535. Glycine soja Siebold & Zucc.
Wild. VIR 1007; SY 513009. Collected 1929 in Primorye, Russian Federation.

PI 639536. Glycine max (L.) Merr.
Landrace. VIR 1022; SY 513010. Collected 1929 in Primorye, Russian Federation.

PI 639537. Glycine max (L.) Merr.
Landrace. VIR 1040; SY 513011. Collected 1929 in Primorye, Russian Federation.

PI 639538. Glycine max (L.) Merr.
Landrace. VIR 2485; SY 513012. Collected 1929 in Amur, Russian Federation.

PI 639539. Glycine max (L.) Merr.
Landrace. VIR 2968; SY 513013. Collected 1930 in Korea, North.

PI 639540. Glycine max (L.) Merr.
Landrace. VIR 2974; SY 513014. Collected 1930 in Korea, North.

PI 639541. Glycine max (L.) Merr.
Landrace. VIR 2983; SY 513015. Collected 1930 in Korea, North.

PI 639542. Glycine max (L.) Merr.
Landrace. VIR 3712; SY 513016. Collected 1932 in Primorye, Russian Federation.

PI 639543. Glycine max (L.) Merr.
Landrace. VIR 3715; SY 513017. Collected 1932 in Primorye, Russian Federation.

PI 639544. Glycine max (L.) Merr.
Landrace. VIR 3717; SY 513018. Collected 1932 in Primorye, Russian Federation.

PI 639545. Glycine max (L.) Merr.
Landrace. VIR 3744; SY 513019; SAVICHEVSKAYA 409. Collected 1932 in Primorye, Russian Federation.

PI 639546. Glycine max (L.) Merr.
Landrace. VIR 4381; SY 513020; DV 2410. Collected 1949 in Primorye, Russian Federation.

PI 639547. Glycine max (L.) Merr.
Landrace. VIR 4797; SY 513021; DOBRUDZHANKA 706. Collected 1951 in Moldova.

PI 639548. Glycine max (L.) Merr.
Landrace. VIR 4798; SY 513022; DOBRUDZHANKA 707. Collected 1951 in Moldova.

PI 639549. Glycine max (L.) Merr.
Landrace. VIR 4799; SY 513023; DOBRUDZHANKA 708. Collected 1951 in Moldova.

PI 639550. Glycine max (L.) Merr.
Landrace. VIR 4803; SY 513024; KSHI 713. Collected 1951 in Moldova.

PI 639551. Glycine max (L.) Merr.
Landrace. VIR 4806; SY 513025; KSHI 716. Collected 1951 in Moldova.

PI 639552. Glycine max (L.) Merr.
Landrace. VIR 4826; SY 513026; DOBRUDZHANKA 1062. Collected 1951 in Moldova.

PI 639553. Glycine max (L.) Merr.
Landrace. VIR 5040; SY 513027; STAVROPOLSKAYA 398. Collected 1954 in Stavropol, Russian Federation.

PI 639554. Glycine max (L.) Merr.
Landrace. VIR 5418; SY 513028. Collected 1959 in Primorye, Russian Federation.

PI 639555. Glycine max (L.) Merr.
Landrace. VIR 5419; SY 513029. Collected 1959 in Primorye, Russian Federation.

PI 639556. Glycine max (L.) Merr.
Landrace. VIR 5604; SY 513030. Collected 1961 in Primorye, Russian Federation.

PI 639557. Glycine max (L.) Merr.
Landrace. VIR 5625; SY 513031. Collected 1962 in Primorye, Russian Federation.

PI 639558. Glycine max (L.) Merr.
Landrace. VIR 6493; SY 513032; VYTKA 1. Collected 1977 in Ukraine.

PI 639559. Glycine max (L.) Merr.
Landrace. VIR 6494; SY 513033; VYTKA 2. Collected 1977 in Ukraine.

PI 639560. Glycine max (L.) Merr.
Landrace. VIR 6805; SY 513034; KOREISKAYA MESTNAYA. Collected 1975 in Primorye, Russian Federation.

PI 639561. Glycine max (L.) Merr.
Landrace. VIR 6871; SY 513035. Collected 1978 in Philippines.

PI 639562. Glycine max (L.) Merr.
Landrace. VIR 6872; SY 513036. Collected 1978 in Philippines.

PI 639563. Glycine max (L.) Merr.
Landrace. VIR 6874; SY 513037. Collected 1978 in Philippines.

PI 639564. Glycine max (L.) Merr.
Landrace. VIR 6875; SY 513038. Collected 1978 in Philippines.

PI 639565. Glycine max (L.) Merr.
Landrace. VIR 6876; SY 513039. Collected 1978 in Philippines.

PI 639566. Glycine max (L.) Merr.
Landrace. VIR 6877; SY 513040. Collected 1978 in Philippines.

PI 639567. Glycine max (L.) Merr.
Landrace. VIR 6929; SY 513041. Collected 1976 in Primorye, Russian Federation.

PI 639568. Glycine max (L.) Merr.
Landrace. VIR 6930; SY 513042. Collected 1976 in Primorye, Russian Federation.

PI 639569. Glycine max (L.) Merr.
Landrace. VIR 6979; SY 513043; PELICAN SM-ICA. Collected 1977 in Colombia.

PI 639570. Glycine max (L.) Merr.
Landrace. VIR 7010; SY 513044. Collected 1978 in Philippines.

PI 639571. Glycine max (L.) Merr.
Landrace. VIR 8270; SY 513045. Collected 1982 in Colombia.

PI 639572. Glycine max (L.) Merr.
Landrace. VIR 8981; SY 513046; SOYA MESTNAYA. Collected 1979 in Ghana.

PI 639573. Glycine max (L.) Merr.
Landrace. VIR 9118; SY 513047; LOCAL. Collected 1984 in Burundi.

PI 639574. Glycine max (L.) Merr.
Landrace. VIR 9119; SY 513048; LOCAL. Collected 1984 in Burundi.

PI 639575. Glycine max (L.) Merr.
Landrace. VIR 9120; SY 513049; LOCAL. Collected 1984 in Burundi.

PI 639576. Glycine max (L.) Merr.
Landrace. VIR 9121; SY 513050; LOCAL. Collected 1984 in Burundi.

PI 639577. Glycine max (L.) Merr.
Landrace. VIR 9122; SY 513051; CH-3. Collected 1984 in Seychelles.

PI 639578. Glycine max (L.) Merr.
Landrace. VIR 9123; SY 513052; CARIBE. Collected 1977 in Seychelles.

PI 639579. Glycine max (L.) Merr.
Landrace. VIR 9260; SY 513053. Collected 1985 in Vietnam.

PI 639580. Glycine soja Siebold & Zucc.
Wild. VIR 9816; SY 513054; L. 61/4. Collected 1985 in Amur, Russian Federation.

PI 639581. Glycine soja Siebold & Zucc.
Wild. VIR 9817; SY 513055; L. 115/2. Collected 1985 in Amur, Russian Federation.

PI 639582. Glycine soja Siebold & Zucc.
Wild. VIR 9818; SY 513056; L. 171/3. Collected 1985 in Amur, Russian Federation.

PI 639583. Glycine soja Siebold & Zucc.
Wild. VIR 9819; SY 513057; L. 185/2. Collected 1985 in Amur, Russian Federation.

PI 639584. Glycine soja Siebold & Zucc.
Wild. VIR 9820; SY 513058; L. 192/4. Collected 1985 in Amur, Russian Federation.

PI 639585. Glycine soja Siebold & Zucc.
Wild. VIR 9853; SY 513059; KZ 653. Collected 1985 in Amur, Russian Federation.

PI 639586. Glycine soja Siebold & Zucc.
Wild. VIR 9854; SY 513060; KB 14. Collected 1985 in Amur, Russian Federation.

PI 639587. Glycine soja Siebold & Zucc.
Wild. VIR 9855; SY 513061; KM 6394. Collected 1985 in Amur, Russian Federation.

PI 639588. Glycine soja Siebold & Zucc.
Wild. VIR 9856; SY 513062; KA 325. Collected 1985 in Amur, Russian Federation.

PI 639589. Glycine soja Siebold & Zucc.
Wild. VIR 9857; SY 513063; KB 11. Collected 1985 in Amur, Russian Federation.

PI 639590. Glycine soja Siebold & Zucc.
Wild. VIR 9858; SY 513064; KZ 659. Collected 1985 in Amur, Russian Federation.

PI 639591. Glycine soja Siebold & Zucc.
Wild. VIR 9859; SY 513065; KB 34. Collected 1985 in Amur, Russian Federation.

PI 639592. Glycine soja Siebold & Zucc.
Wild. VIR 9860; SY 513066; KA 489. Collected 1985 in Amur, Russian Federation.

PI 639593. Glycine soja Siebold & Zucc.
Wild. VIR 9861; SY 513067; KB 53. Collected 1985 in Amur, Russian Federation.

PI 639594. Glycine soja Siebold & Zucc.
Wild. VIR 9862; SY 513068; KB 15. Collected 1985 in Amur, Russian Federation.

PI 639595. Glycine soja Siebold & Zucc.
Wild. VIR 9863; SY 513069; KZ 641. Collected 1985 in Amur, Russian Federation.

PI 639596. Glycine soja Siebold & Zucc.
Wild. VIR 9864; SY 513070; KB 84. Collected 1985 in Amur, Russian Federation.

PI 639597. Glycine soja Siebold & Zucc.
Wild. VIR 9865; SY 513071; KBL 6374. Collected 1985 in Amur, Russian Federation.

PI 639598. Glycine soja Siebold & Zucc.
Wild. VIR 9866; SY 513072; KZ 604. Collected 1985 in Amur, Russian Federation.

PI 639599. Glycine soja Siebold & Zucc.
Wild. VIR 9867; SY 513073; KB 6. Collected 1985 in Amur, Russian Federation.

PI 639600. Glycine soja Siebold & Zucc.
Wild. VIR 9868; SY 513074; KBL 95. Collected 1985 in Amur, Russian Federation.

PI 639601. Glycine soja Siebold & Zucc.
Wild. VIR 9869; SY 513075; KM 96. Collected 1985 in Amur, Russian Federation.

PI 639602. Glycine soja Siebold & Zucc.
Wild. VIR 9870; SY 513076; KBL 95. Collected 1985 in Amur, Russian Federation.

PI 639603. Glycine soja Siebold & Zucc.
Wild. VIR 9871; SY 513077; KM 106. Collected 1985 in Amur, Russian Federation.

PI 639604. Glycine soja Siebold & Zucc.
Wild. VIR 9872; SY 513078; KA 113. Collected 1985 in Amur, Russian Federation.

PI 639605. Glycine soja Siebold & Zucc.
Wild. VIR 9873; SY 513079; KB 50. Collected 1985 in Amur, Russian Federation.

PI 639606. Glycine soja Siebold & Zucc.
Wild. VIR 9874; SY 513080; KBL 6387. Collected 1985 in Amur, Russian Federation.

PI 639607. Glycine soja Siebold & Zucc.
Wild. VIR 9875; SY 513081; KM 6405. Collected 1985 in Amur, Russian Federation.

PI 639608. Glycine soja Siebold & Zucc.
Wild. VIR 9876; SY 513082; KZ 650. Collected 1985 in Amur, Russian Federation.

PI 639609. Glycine soja Siebold & Zucc.
Wild. VIR 9877; SY 513083; KB 16. Collected 1985 in Amur, Russian Federation.

PI 639610. Glycine soja Siebold & Zucc.
Wild. VIR 9878; SY 513084; KBL 6388. Collected 1985 in Amur, Russian Federation.

PI 639611. Glycine soja Siebold & Zucc.
Wild. VIR 9879; SY 513085; KM 6408. Collected 1985 in Amur, Russian Federation.

PI 639612. Glycine soja Siebold & Zucc.
Wild. VIR 9880; SY 513086; KZ 530. Collected 1985 in Amur, Russian Federation.

PI 639613. Glycine soja Siebold & Zucc.
Wild. VIR 9881; SY 513087; KA 320. Collected 1985 in Amur, Russian Federation.

PI 639614. Glycine soja Siebold & Zucc.
Wild. VIR 9882; SY 513088; KB 23. Collected 1985 in Amur, Russian Federation.

PI 639615. Glycine soja Siebold & Zucc.
Wild. VIR 9883; SY 513089; KBL 6389. Collected 1985 in Amur, Russian Federation.

PI 639616. Glycine soja Siebold & Zucc.
Wild. VIR 9884; SY 513090; KM 6409. Collected 1985 in Amur, Russian Federation.

PI 639617. Glycine soja Siebold & Zucc.
Wild. VIR 9885; SY 513091; KA 440. Collected 1985 in Amur, Russian Federation.

PI 639618. Glycine soja Siebold & Zucc.
Wild. VIR 9886; SY 513092; KB 227. Collected 1985 in Amur, Russian Federation.

PI 639619. Glycine soja Siebold & Zucc.
Wild. VIR 9887; SY 513093; KBL 6390. Collected 1985 in Amur, Russian Federation.

PI 639620. Glycine soja Siebold & Zucc.
Wild. VIR 9888; SY 513094; KM 6410. Collected 1985 in Amur, Russian Federation.

PI 639621. Glycine soja Siebold & Zucc.
Wild. VIR 9889; SY 513095; KT 156. Collected 1985 in Amur, Russian Federation.

PI 639622. Glycine soja Siebold & Zucc.
Wild. VIR 9890; SY 513096; KZ 552. Collected 1985 in Amur, Russian Federation.

PI 639623. Glycine soja Siebold & Zucc.
Wild. VIR 9891; SY 513097; KBL 552. Collected 1985 in Amur, Russian Federation.

PI 639624. Glycine soja Siebold & Zucc.
Wild. VIR 9892; SY 513098; KZ 671. Collected 1985 in Amur, Russian Federation.

PI 639625. Glycine soja Siebold & Zucc.
Wild. VIR 9893; SY 513099; KA 317. Collected 1985 in Amur, Russian Federation.

PI 639626. Glycine soja Siebold & Zucc.
Wild. VIR 9894; SY 513100; KZ 621. Collected 1985 in Amur, Russian Federation.

PI 639627. Glycine max (L.) Merr.
Cultivated. VIR 9960; SY 513101; SVETLAY. Developed in Russian Federation.

PI 639628. Glycine max (L.) Merr.
Cultivated. VIR 10382; SY 513102; LADA. Developed in Russian Federation.

PI 639629. Glycine max (L.) Merr.
Breeding. VIR 10388; SY 513103; SOER 13-91. Developed in Russian Federation.

PI 639630. Glycine max (L.) Merr.
Cultivated. VIR 10633; SY 513104; ARMAVIRSKAYA 2. Developed in Russian Federation.

PI 639631. Glycine max (L.) Merr.
Cultivated. VIR 10634; SY 513105; ARMAVIRSKAYA 4. Developed in Russian Federation.

PI 639632. Glycine max (L.) Merr.
Cultivated. VIR 10636; SY 513106; RENTA. Developed in Russian Federation.

PI 639633. Glycine max (L.) Merr.
Cultivated. VIR 10638; SY 513107; GARMONIYA. Developed in Russian Federation.

PI 639634. Glycine max (L.) Merr.
Cultivated. VIR 10640; SY 513108; DAURIYA. Developed in Russian Federation.

PI 639635. Glycine soja Siebold & Zucc.
Wild. VIR 10643; SY 513109; USSURIISKAYA. Collected 1985 in Primorye, Russian Federation.

PI 639636. Glycine max (L.) Merr.
Uncertain. VIR 10677; SY 513110.

PI 639637. Glycine max (L.) Merr.
Uncertain. VIR 10678; SY 513111.

The following were collected by Helmer Ayala, Universidad de San Carlos de Guatemala, Ciudad Universitaria, Zona 12, Apartado Postal No 1545, San Carlos, Guatemala. Received 01/26/1998.

PI 639638. Capsicum annuum L.
Landrace. FAUSAC 123; chile cahabonero; NGRL 265; Grif 14095. Collected 06/18/1997 in Alta Verapaz, Guatemala. Latitude 15° 34' N. Longitude 89° 43' W. Elevation 300 m. Samastun, Lankin.

PI 639639. Capsicum annuum L.
Landrace. FAUSAC 290; chiltepe; NGRL 277; Grif 14107. Collected 09/03/1997 in Alta Verapaz, Guatemala. Latitude 15° 24' N. Longitude 89° 38' W. Elevation 100 m. Panzos, Panzos.

PI 639640. *Capsicum annuum* L.
Landrace. FAUSAC 294; tzulik; NGRL 278; Grif 14108. Collected 09/03/1997 in Alta Verapaz, Guatemala. Latitude 15° 24' N. Longitude 89° 38' W. Elevation 100 m. Panzos, Panzos.

The following were collected by Teresa Kotlinska, Research Institute of Vegetable Crops, Plant Genetic Resources Laboratory, Konstytucji 3 Maja 1/3, Skierniewice, Skierniewice 96-100, Poland; Philipp W. Simon, USDA, ARS, Vegetable Crops Research Unit, University of Wisconsin, Department of Horticulture, Madison, Wisconsin 53706, United States. Received 01/27/2000.

PI 639641. *Capsicum annuum* L.
Uncertain. P-012; POL 247147; Papryka; Grif 14361. Collected 07/13/1999 in Poland. Latitude 52° 41' 43" N. Longitude 22° 33' 52" E. Bujenka 44. Farm of Janina Bachorek.

PI 639642. *Capsicum annuum* L.
Uncertain. P-019; POL 247148; Papryka; Grif 14362. Collected 07/13/1999 in Poland. Latitude 52° 41' 39" N. Longitude 22° 33' 41" E. Bujenka 30, Farm of Bachorek Janina, Ludwik.

PI 639643. *Capsicum annuum* L.
Uncertain. P-043; POL 247146; Papryka (czerwona); Grif 14363. Collected 07/14/1999 in Poland. Latitude 52° 44' 13" N. Longitude 23° 27' 28" E. Berezowo Stare, Farm of Mikulicz Wiera.

PI 639644. *Capsicum annuum* L.
Uncertain. P-069; POL 247149; Papryka; Grif 14364. Collected 07/14/1999 in Poland. Latitude 52° 39' 12" N. Longitude 23° 26' 10" E. Dubicze Cerkiewne, Farm of Panafiluk Anna.

PI 639645. *Capsicum annuum* L.
Uncertain. P-070; POL 247157; Papryka; Grif 14365. Collected 07/14/1999 in Poland. Latitude 52° 39' 12" N. Longitude 23° 26' 10" E. Dubicze Cerkiewne, Farm of Panafiluk Anna.

PI 639646. *Capsicum annuum* L.
Uncertain. P-123; POL 247150; Papryka czerwona; Grif 14366. Collected 07/15/1999 in Poland. Latitude 51° 42' 55" N. Longitude 23° 29' 7" E. Hanna 82, Farm of Sieniawska Maria.

The following were collected by Philipp W. Simon, USDA, ARS, Vegetable Crops Research Unit, University of Wisconsin, Department of Horticulture, Madison, Wisconsin 53706, United States; Bassam Al-Safadi, Atomic Energy Commission, P.O. Box 6091, Damascus, Syria. Received 10/29/1999.

PI 639647. *Capsicum annuum* L.
Landrace. S034; Grif 14513. Collected 07/27/1999 in Syria. Latitude 36° 11' 57" N. Longitude 37° 9' 10" E. Bab Alfraj seed market, Aleppo. Pepper, very long medium large, hot green.

The following were collected by Karen A. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 402, BARC-West, Beltsville, Maryland 20705-2350, United States; Fatima Mereles, Facultad de Ciencias Quimicas of

the National University, Herbarium, San Lorenzo, Paraguay; Pedro Juan Caballero, Ministry of Agriculture and Livestock, Instituto Agronomico Nacional, Caacupe, Paraguay; David E. Williams, Internat'l Plant Genetic Resources Inst., Regional Office for the Americas, c/o CIAT, Int'l Ctr. for Tropical Agric., Cali, Valle, Colombia. Received 06/17/1998.

PI 639648. Capsicum baccatum var. pendulum (Willd.) Eshbaugh
Landrace. WWMC 139; ky y'; Grif 14149. Collected 05/14/1998 in Cordillera, Paraguay. Latitude 25° 23' 1" S. Longitude 57° 2' 45" W. Elevation 255 m. Piribebuy, Compania Guazu Rokay, Route 2, km. 62, crossroads, Chiperia El Indio. Garden. Valley, soil drainage moderate, level, soil loam, no stones. Plants erect, 80 cm tall. Flowers white with yellowish green spots at the base of the corolla. Fruits triangular, elongated, 4 cm long, 1 cm wide, pointed at blossom end, shiny red at maturity, piquant. All mature fruits collected. Fruits used to make pickles, for condiments, and to flavor sausages for on-site restaurant and home use.

The following were collected by David E. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 400, BARC-West, Beltsville, Maryland 20705-2350, United States; Karen A. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 402, BARC-West, Beltsville, Maryland 20705-2350, United States; Pedro Juan Caballero, Ministry of Agriculture and Livestock, Instituto Agronomico Nacional, Caacupe, Paraguay; M. Quintana, Museo Nacional de Historia Natural del Paraguay, Ruta MariscalEstigarribia, Km 10.5, San Lorenzo, Paraguay. Received 04/09/2002.

PI 639649. Capsicum baccatum L. **var. baccatum**
Wild. WWCQ-207; NGRL 284; Grif 15022. Collected 03/22/2002 in Canendiyu, Paraguay. Latitude 24° 27' 50" S. Longitude 55° 42' 53" W. Elevation 150 m. Distrito San Isidro de Curuguaty, 2 km W of Curuguaty. Near road. Edge of degraded forest remnant with cattle paths. Area of rolling hills. Many bromeliads. Well-drained soil. Forests in area being intensively logged. 40-50 cm tall. Many fruits, 1 1/2-2 cm long, turning from green to orange to bright red when mature.

The following were collected by Fatima Mereles, Facultad de Ciencias Quimicas of the National University, Herbarium, San Lorenzo, Paraguay; Pedro Juan Caballero, Ministry of Agriculture and Livestock, Instituto Agronomico Nacional, Caacupe, Paraguay. Received 05/07/1999.

PI 639650. Capsicum baccatum var. pendulum (Willd.) Eshbaugh
Landrace. MC 149; locotito; NGRL 281; Grif 14223. Collected 07/29/1998 in Itapua, Paraguay. Latitude 26° 55' 26" S. Longitude 55° 29' 44" W. Pirapo, Forestry Development Center (CEDFO), Km 61.5, Ruta VI. Soil texture loam, drainage moderate. Slope 5 degrees, slope aspect west. Plant erect, supported, approximately 80 cm. tall. Branches in zig zag. No flowers. Fruits pendulous, brilliant red, piquant. Principally consumed at home. Harvested continually.

The following were collected by Karen A. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 402, BARC-West, Beltsville, Maryland 20705-2350, United States; Pedro Juan Caballero, Ministry of Agriculture and Livestock, Instituto Agronomico Nacional, Caacupe, Paraguay; David E.

Williams, Internat'l Plant Genetic Resources Inst., Regional Office for the Americas, c/o CIAT, Int'l Ctr. for Tropical Agric., Cali, Valle, Colombia. Received 06/17/1998.

PI 639651. Capsicum chacoense Hunz.
Wild. WWC 140; yemade; Grif 14150. Collected 05/15/1998 in Presidente Hayes, Paraguay. Latitude 24° 56' 58" S. Longitude 57° 33' 10" W. Elevation 60 m. Benjamin Aceual, Compania Colomia Rio Verde, km. 49, near a Tova community. Plain. Slope 0 deg. Soil drainage poor, soil fine sand, acidic, color brown, stoniness low. Dominant plants: Gramineae spp. Closest meterological station: Benjamin Accual Agricultural School. Plant erect, approximately 80 cm tall. Flowers small, white, without spots, anthers yellow with wings at the base of the filaments. Fruits erect, elongated, triangular, 2.5 cm long, 0.5 cm wide, purplish greenish, orange at maturity, piquant. Seven fruits collected. Very scarce. Only two plants found. Infestation of galls on the branches. Used as a condiment and a medicine by the Tovas.

The following were collected by Charles E. Simpson, Texas A&M University, P. O. Box 292, Stephenville, Texas 76401, United States; David E. Williams, Internat'l Plant Genetic Resources Inst., Regional Office for the Americas, c/o CIAT, Int'l Ctr. for Tropical Agric., Cali, Valle, Colombia; M. Quintana, Museo Nacional de Historia Natural del Paraguay, Ruta MariscalEstigarribia, Km 10.5, San Lorenzo, Paraguay; Israel Vargas, Fundacion Amigos de la Naturaleza, Casilla 2241, Santa Cruz, Bolivia; Andrew Jarvis, International Plant Genetic Resources Institute, International Center for Tropical Agriculture, Apdo. Aereo 6713, Cali, Colombia. Received 06/12/2002.

PI 639652. Capsicum chacoense Hunz.
Wild. WiSVgJsQ 1502; NGRL 344; Grif 15050. Collected 04/23/2002 in Boqueron, Paraguay. Latitude 21° 50' 32" S. Longitude 62° 19' 21" W. Elevation 300 m. Distrito Pedro P. Pena, Picada 500, 92 km W of Transchaco highway at Mariscal Estigarribia. Secondary vegetation along roadside. Low shrub, 1 m tall, profusely branched. Flowers white, immature fruits ovoid, 1 cm long, turning black then red when ripe. Fruits extremely piquant.

The following were collected by Charles E. Simpson, Texas A&M University, P. O. Box 292, Stephenville, Texas 76401, United States; David E. Williams, Internat'l Plant Genetic Resources Inst., Regional Office for the Americas, c/o CIAT, Int'l Ctr. for Tropical Agric., Cali, Valle, Colombia; Israel Vargas, Fundacion Amigos de la Naturaleza, Casilla 2241, Santa Cruz, Bolivia. Received 06/13/2002.

PI 639653. Capsicum chacoense Hunz.
Wild. WiSVg 1509; ku' yi (Guarani); NGRL 350; Grif 15051. Collected 05/07/2002 in Alto Paraguay, Paraguay. Latitude 20° 5' 45" S. Longitude 61° 53' 55" W. Elevation 300 m. Distrito Cap. Pablo Lagerenza, ca. 5 km S of Fortin Gabino Mendoza on road to Garay. Open chaco forested grassland on stabilized sand dunes. Shrub to 80 cm tall, profusely branched. Fruits red, piquant.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Plant, & Environmental Sciences, Las Cruces, New Mexico 88003-0003, United States. Received 12/18/1992.

PI 639654. Capsicum chinense Jacq.
13985; Grif 9240. Collected in Costa Rica.

PI 639655. Capsicum chinense Jacq.
Peru-5363; Grif 9268. Collected in Costa Rica.

PI 639656. Capsicum annuum L.
Peru-5374; Grif 9270. Collected in Costa Rica.

The following were donated by Charles Perkins, 2306 S. Glen Arbor, Santa Ana, California 92704, United States. Received 05/23/1995.

PI 639657. Capsicum chinense Jacq.
"Chocolate Scotch Bonnet"; Grif 12466.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Plant, & Environmental Sciences, Las Cruces, New Mexico 88003-0003, United States. Received 12/18/1992.

PI 639658. Capsicum frutescens L.
Peru-5448; Grif 9216. Collected in Costa Rica.

PI 639659. Capsicum chinense Jacq.
14388; Grif 9320. Collected in Costa Rica.

PI 639660. Capsicum frutescens L.
Peru-5489; Grif 9326. Collected in Costa Rica.

The following were collected by Jeffrey T. Williams, Smithsonian Institution, National Museum of Natural History, Div. of Fishes, NHB WG-12, MRC-159, Washington, District of Columbia 20560, United States. Received 08/13/1997.

PI 639661. Capsicum frutescens L.
Landrace. JTW-1; PIMA; Grif 13979. Collected 05/07/1997 in Vanuatu. Latitude 17° 44' S. Longitude 168° 19' E. Port Vila, Efate Island. Farmer's market. Fruits red, length 1-2 cm, elongated.

The following were collected by Helmer Ayala, Universidad de San Carlos de Guatemala, Ciudad Universitaria, Zona 12, Apartado Postal No 1545, San Carlos, Guatemala. Received 01/26/1998.

PI 639662. Capsicum frutescens L.
Landrace. FAUSAC 85; chiltepe; NGRL 263; Grif 14093. Collected 05/07/1997 in Suchitepequez, Guatemala. Latitude 14° 35' N. Longitude 91° 27' W. Elevation 625 m. El Pito, San Pablo.

The following were donated by Will Bonsall, Scatterseed Project, 39 Bailey Road, Industry, Maine 04938, United States. Received 05/30/2000.

PI 639663. Capsicum annuum L.
Uncertain. CF-99-03; Makah Lal; Grif 14486. Collected 1999 in Rajasthan, India. Market sample from Udaipur. yellow chili.

PI 639664. Capsicum annuum L.
Uncertain. CF-99-04; Grif 14487. Collected 1999 in Rajasthan, India. From Udaipur. green chili.

The following were developed by Ron Cordsiemon, USDA, NRCS, Elsberry Plant Materials Center, 2803 North Highway 79, Elsberry, Missouri 63343, United States. Received 05/31/2005.

PI 639665. Lespedeza capitata Michx.
Uncertain. "Southern Iowa Germplasm"; 9062283; SG0-98-Z3 (weedy). Pedigree - Collected from remnant prairies in the southern one third of the counties of Iowa. Seed has not been altered or modified. For a complete plant description and characteristics refer to the USDA Plant Database.

The following were donated by Rosemary Chng, International Plant Genetic Resouces Institute, Seed Handling Unit, National University of Singapore, Dept. of Botany, Singapore. Received 09/09/1996.

PI 639666. Abelmoschus ficulneus (L.) Wight & Arn.
Uncertain. T89/O-13; IC 90417; Grif 12744. Collected in Rajasthan, India. Kailashnagar, Sirohi.

PI 639667. Abelmoschus ficulneus (L.) Wight & Arn.
Uncertain. T89/O-26; IC 90419; Grif 12745. Collected in Gujarat, India. Thilav, Ahmedabad.

PI 639668. Abelmoschus ficulneus (L.) Wight & Arn.
Uncertain. T89/O-28; IC 90421; Grif 12747. Collected in Gujarat, India. Thilav, Ahmedabad.

PI 639669. Abelmoschus ficulneus (L.) Wight & Arn.
Uncertain. T89/O-49; IC 90429; Grif 12748. Collected in Gujarat, India. Junagadh, Junagadh.

PI 639670. Abelmoschus ficulneus (L.) Wight & Arn.
Uncertain. T89/O-59; IC 90433; Grif 12749. Collected in Gujarat, India. Jalsar, Junagadh.

PI 639671. Abelmoschus ficulneus (L.) Wight & Arn.
Uncertain. T89/O-147; IC 90471; Grif 12759. Collected in Gujarat, India. Kosumba, Surat.

PI 639672. Abelmoschus ficulneus (L.) Wight & Arn.
Uncertain. T89/O-154; IC 90473; Grif 12760. Collected in Gujarat, India. Surat, Surat.

PI 639673. Abelmoschus manihot var. tetraphyllus (Roxb. ex Hornem.) Borss. Waalk.
Uncertain. IC 90512; Grif 12792. Collected in Gujarat, India. Netrang, Surat.

PI 639674. Abelmoschus manihot var. tetraphyllus (Roxb. ex Hornem.) Borss. Waalk.
Uncertain. IC 111553; Grif 12793. Collected in Haryana, India. Kalizan, Ambala.

PI 639675. Abelmoschus manihot var. tetraphyllus (Roxb. ex Hornem.) Borss. Waalk.
Uncertain. IC 111563; Grif 12794. Collected in Uttar Pradesh, India. Bagalhali, Sahranpur.

PI 639676. Abelmoschus tuberculatus Pal & Singh
Uncertain. EC 316079; Grif 12670. Collected in Sri Lanka.

PI 639677. Abelmoschus tuberculatus Pal & Singh
Uncertain. IC 90313; Grif 12673. Collected in Gujarat, India. Maliana, Rajkot.

PI 639678. Abelmoschus tuberculatus Pal & Singh
Uncertain. IC 90319; Grif 12676. Collected in Gujarat, India. Dhoraji, Rajkot.

PI 639679. Abelmoschus tuberculatus Pal & Singh
Uncertain. IC 90321; Grif 12677. Collected in Gujarat, India. Raphaliya, Amreli.

PI 639680. Abelmoschus tuberculatus Pal & Singh
Uncertain. IC 117181; Grif 12681. Collected in Rajasthan, India. Godrela, Kota.

PI 639681. Abelmoschus tuberculatus Pal & Singh
Uncertain. IC 93869; Grif 12684. Collected in Madhya Pradesh, India. Tinkheda, Chhinwara.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Plant, & Environmental Sciences, Las Cruces, New Mexico 88003-0003, United States. Received 03/04/1993.

PI 639682. Capsicum galapagoense Hunz.
50026; Grif 1567. Collected in Netherlands. Dr. Bosland received the original seed from the Netherlands and they got the seed from Dr. Paul G. Smith.

The following were developed by Todd Pfeiffer, University of Kentucky, Department of Plant and Soil Sciences, 329 Plant Science Building, Lexington, Kentucky 40546-0312, United States; D.L. Pilcher, University of Kentucky, Dept. of Agronomy, Lexington, Kentucky 40546, United States. Received 05/31/2005.

PI 639683. Glycine max (L.) Merr.
Breeding. Pureline. KY98-2047. GP-311. Pedigree - ('CF492' x 'Calhoun')

x KY94-3126. Has extra-dense pubescence (3475 trichomes/cm leaf abaxial surface compared to 475 trichomes/cm for lines with normal pubescence density and 1600 trichomes/cm for lines with dense pubescence), and has very rugose leaves. Relative maturity is 5.0. Has purple flowers, gray pubescence, tan pod color, buff hilum color, and determinate growth habit. Yielded 36% more than the original donor of the Pd1Pd2 alleles (L79-1815, relative maturity 4.2) and 20% more than the first cycle extra-dense pubescence selection (relative maturity 5.0). In the Kentucky Soybean Performance Tests it yielded 3660 kg/ha, significantly lower than an original parental cultivar Hutcheson (4290 kg/ha).

PI 639684. Glycine max (L.) Merr.
Breeding. Pureline. KY98-2932. GP-312. Pedigree - 'Macon' x KY94-3121. Has extra-dense pubescence (2650 trichomes/cm leaf abaxial surface compared to 475 trichomes/cm for lines with normal pubescence density and 1600 trichomes/cm for lines with dense pubescence) with normal leaf appearance. Relative maturity is 5.0. Has purple flowers, gray pubescence, brown pod color, imperfect black hilum color, and determinate growth habit. Yielded 36% more than the original donor of the Pd1Pd2 alleles (L79-1815, relative maturity 4.2) and 20% more than the first cycle extra-dense pubescence selection (relative maturity 5.0). In the Kentucky Soybean Performance Tests it yielded 3510 kg/ha, significantly lower than an original parental cultivar Hutcheson (4290 kg/ha).

The following were developed by Wenwei Xu, Texas A&M University, Agricultural Research and Extension Center, 1102 East F.M. 1294, Lubbock, Texas 79403, United States. Received 06/03/2005.

PI 639685. Zea mays L.
Breeding. Pureline. Tx204. Pedigree - Developed by pedigree breeding method from the breeding cross AR01150:N0406. Has white cobs, which may be useful for food-grade corn breeding. Has above average early vigor, upright and dark-green leaves, green silks, 3-5 primary tassel branches, 16-18 rows of semi-dent yellow and long kernels. Its maturity, plant and ear height are similar to B73. Iit flowers 72 to 78 days after planting. Its plants are 161 to 181 cm tall, and ears height is 55 to 80 cm. The husks fully cover the ears. It has low leaf firing and tassel blasting when the temperatures are above 38C, indicating they have good heat tolerance. It has moderate resistance to corn earworm, low percentage of molded kernels. It has improved drought tolerance. The silking and pollen shedding are well synchronized and usually the silking is one day ahead of pollen shedding. Under severe drought stress, it has significantly lower barren plants, better seed setting, lower grain mold, and better stay green than other tested lines. It is susceptible mites. Has been evaluated in combinations with public lines, Holden?s lines and breeding lines in multiple environments in Texas and Mississippi. The best combinations are with B110, B113, and LH200, which yielded equally or significantly better than commercial hybrids. The hybrids have large kernels and low earworm feeding damages, grain molds and aflatoxin contamination This line can be used as a parental line for producing hybrids or as a germplasm for further breeding.

PI 639686. Zea mays L.
Breeding. Pureline. Tx205. Pedigree - Developed by pedigree breeding method from the breeding cross AR01150:N0406. Has red cobs. Has above

average early vigor, upright and dark-green leaves, green silks, 3-5 primary tassel branches, 16-18 rows of semi-dent yellow and long kernels. Its maturity, plant and ear height are similar to B73. Flowers 72 to 78 days after planting. Its plants are 161 to 181cm tall, and ear height is 55 to 80 cm. The husks fully cover the ears. It has low leaf firing and tassel blasting when the temperatures are above 38C, indicating they have good heat tolerance. It has moderate resistance to corn earworm, low percentage of molded kernels. It has improved drought tolerance. The silking and pollen shedding are well synchronized and usually the silking is one day ahead of pollen shedding. Under severe drought stress, it has significantly lower barren plants, better seed setting, lower grain mold, and better stay green than other tested lines. It is susceptible to mites. Has been evaluated in combinations with public lines, Holden's lines and breeding lines in multiple environ ments in Texas and Mississippi. The best combinations are with B110, B113, and LH200, which yielded equally or significantly better than commercial hybrids. The hybrids have large kernels and low earworm feeding damages, grain molds and aflatoxin contamination. This line can be used as a parental line for producing hybrids or as a germplasm for further breeding.

The following were developed by D. Gogas, N.AG.RE.F. - Cereal Institute, PO Box 60411, 57001 Thermi-Thessaloniki, Greece. Received 05/11/2005.

PI 639687. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "OROPOS"; YG-09275-1. CV-975. Pedigree - Siete Cerros / (2766/400) Erythrospermum. Released 2000. Short, mid-season, spring bread wheat with a height of 100 cm. Needs 172 d to reach maturity when sowing in fall, compared to 167 for Siete Cerros. Has red (bronze), parallel, compact spikes with long awns and ovate, bronze and hard seeds. 1000 kernel weight is 35.2 gm compared to 34.8 gm for Siete Cerros. Resistant to lodging and tolerant to low temperatures and to diverse pedoclimatic conditions. Proved to be resistant to three rusts strains. Mean grain yield of 4.57 Mg/ha, equal to mean grain yield of the two national checks Vergina and Yecora-S. The mean dry flour protein concentration is 148.7 gm/kg compared to 147.8 gm/kg, a mean hw equal to 74.9 compared to 73.7, and gluten index estimations made by the Perten Glutomatic instrument showed a gluten index equal to 95.3 compared to 74.7, with the latter being the two national checks, Vergina and Yecora-S.

The following were developed by Fred A. Gray, University of Wyoming, College of Agriculture, P. O. Box 3354, Laramie, Wyoming 82071, United States; Ron Delaney, University of Wyoming, Plant Science, Insect and Soils Dep., Box 3354, Laramie, Wyoming 82071, United States; Raymond L. Ditterline, Montana State University, Department of Plant and Soil Science, P.O. Box 173120, Bozeman, Montana 59717-0312, United States; D.W. Wichman, Montana State University, Central Agric. Research Center, Moccasin, Montana 59462, United States; Mark E. Majerus, USDA-NRCS, Plant Materials Center, Rt. 2, Box 1189, Bridger, Montana 59014-9718, United States; Dennis Cash, Montana State University, Animal & Range Sciences Department, 235 Linfield Hall, Bozeman, Montana 59717-3120, United States; D.W. Shigaki, USDA-ARS, Baylor College of Medicine, Children's Nutrition Research Center, Houston, Texas 77030, United States; D.W. Koch, University of Wyoming, Dept. of Plant Sciences, Laramie, Wyoming, United States; F. Hruby, University of Wyoming, Agricultural

Experiment Station, Wyoming, United States; A.M. Gray, University of Wyoming, Agricultural Experiment Station, Dept. of Plant Sciences, Wyoming, United States. Received 06/13/2005.

PI 639688. Onobrychis viciifolia Scop.
Cultivar. Mixture. "Shoshone". CV-258. Pedigree - A highly heterozygous seed line derived from the open pollination of 176 plants from six different sources which survived for 16 months in the presence of the northern root-knot nematode. Sources from which selections were made, number of plants selected and percent contribution to the intercross were: lines directly from Eski (86, 49%), W-40 (32, 18%), Remont (30, 17%), and Melrose (28, 16%). Flower color is pink with dark pink vertical strips. Leaves are a medium green. Plant height, including racemes, averaged 76 cm under irrigation and less under dryland conditions. Forage quality under irrigation was crude protein = 17.5%, acid detergent fiber = 30.1 % and neutral detergent fiber = 38.2%. Overall forage yield versus Remont sainfoin at seven locations, adjusted to 12% moisture, was 9.80 vs 9.06/Mg when irrigated and 2.71 vs 2.58/Mg under dryland conditions. Displayed excellent winterhardiness, similar to Remont. Expressed similar compatibility with Remont in interplantings with 'Bozoisky Select' Russian wildrye under dryland conditions and with 'Manska' intermediate wheatgrass under irrigation. In an irrigated legume trial it had the second highest 4-year yield of 16 legume entries including alfalfa, birdsfoot trefoil and cicer milkvetch. In tests conducted in the greenhouse, it expressed a higher level of tolerance nematode than Remont by having higher per plant dry shoot weight, and root biomass, as well as lower plant mortality. Evaluation for resistance to nematodes of cultivars, experimental lines and the world collection of Onobrychis viciifolia, as well as other species of Onobrychis, proved futile, indicating a possible lack of co-evolution. This sainfoin also produced nearly 100% seed first year of seeding.

The following were developed by Kay H. Asay, USDA, ARS, Forage & Range Research Unit, Utah State University, Logan, Utah 84322-6300, United States; Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; A.J. Palazzo, U.S. Army Cold Regions Res. and Engineering Lab., 72 Lyme Road, Hanover, New Hampshire 03755-1290, United States; Steve Larson, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States; Blair Waldron, USDA, ARS, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 06/10/2005.

PI 639689. Psathyrostachys juncea (Fisch.) Nevski
Cultivar. Population. "Bozoisky-II". CV-244; PVP 200600226. Pedigree - The 15 parent clones were derived from two base population synthetics A (9 clones) and B (6 clones).Synthetic-A was comprised of 18 plants from: Vinall, P210, PI 314675, Bozoisky, PI 406471, Shortandinsky, PI 314082, and Jones & Keller #447. Synthetic-B was comprised of 12 plants from Vinall, P210, PI 272136, PI 314675, PI 369234, Bozoisky, PI 406469, and PI 314082. A total of three cycles of recurrent phenotypic selection for plant vigor, increased seed weight and the ability of seedlings to e merge from a deep planting depth was completed within each synthetic population. Selected for seedling vigor (emergence from a deep planting depth), seed mass, seed yield, vegetative vigor, total dry matter

production, and response to drought. Has a much broader genetic base than other Russian wildrye cultivars and has been evaluated extensively on rangeland sites in western United States. Seedling establishment has been equal to or greater than commercially available cultivars. When combined across two locations, itI is significantly taller (92.9 cm) than Mankota (84.3 cm) and Tetracan (85.2 cm). At both locations, it has a significantly longer inflorescence than Bozoisky-Select (10.8 for the former versus 9.0 cm for the latter) and Mankota (8.5 cm). It is a diploid (2n=2x=14) and has the same ploidy level as the commercially available cultivars Bozoisky-Select, Mankota, Swift, and Vinall. Selection emphasis was for increased seedling vigor during establishment. In seeded trials, when planted on a pure live seed basis (PLS), it had significantly more seedlings per unit area (m2) than did Bozoisky-Select and Tetracan. A neighbor-joining tree demonstrated that Bozoisky-II contains substantially more genetic diversity than current diploid and tetraploid cultivars. The average similarity coefficient (0.5823) among genotypes of this line was significantly less ($P<0.05$) than Cabree, Tetracan, and Tetra-1 and numerically less than the other five cultivars that were evaluated. Analysis of molecular variance indicated that it contains substantially more DNA poorphisms than the other eight cultivars that were evaluated.

The following were developed by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg.-N, Lexington, Kentucky 40546-0019, United States. Received 06/13/2005.

PI 639690. Trifolium pratense L.
Genetic. Population. 98-L-38-1808; Unifoliate. Pedigree - This unifoliolate genetic stock appeared among self progeny of a multiple cotyledon genetic stock (L-38-1485). Plants from selfs and crosses of the character were intercrossed under isolated field conditions to produce adequate seed for release. Plant phenotype is characterized by unifoliolate, bifoliolate, and trifoliolate leaves with normal or elongated petioles, shortened internodes, and a generally dwarfed appearance. Early seedling growth is very abnormal, but later under long days, stems elongate and normal appearing flowers appear. Plants are self fertile and selfs produced normal and unifoliolate progenies in approximately equal numbers. The character is apparently inherited in a complex manner and it is not possible to assign gene symbols at this time. Cytological examination indicated normal meiosis.

The following were developed by P. Subrahmanyam, SADC/ICRISAT, Groundnut Project, Lilongwe, Malawi; Carl Deom, University of Georgia, Department of Plant Pathology, Plant Sciences Building, Athens, Georgia 30602, United States; T. Kapewa, Chitedze Agric. Res. Station, Lilongwe, Malawi; C.M. Busolo-Bulafu, Serere Agric. and Animal Res. Inst., Soroti, Uganda; R.A. Naidu, University of Georgia, Dep. of Plant Pathology, Athens, Georgia 30602, United States; A.J. Chiyembekeza, Chitedze Agric. Res. Stn., Lilongwe, Malawi; F.M. Kimmins, National Res. Institute, Kent, England, United Kingdom; P.J.A. van der Merwe, ICRISAT, Lilongwe, Malawi. Received 06/14/2005.

PI 639691. Arachis hypogaea L.
Breeding. Pureline. ICG 12991. GP-122. Pedigree - Originally collected from a farmer's field in south India in 1988. ICRISAT introduced it into Malawi for evaluation during a germplasm screening program for

resistance to groundnut rosette disease and early leafspot disease. Subsequently, it was released in Malawi as 'Baka' and in Uganda as 'Serenut 4T', following extensive testing and distribution by the national programs of each country. A short duration (90-110 days to maturity), drought tolerant, spanish-type peanut germplasm line with a high level of field resistance to groundnut rosette disease virus complex. Resistance to groundnut rosette disease is due to aphid resistance, not due to resistance to the virus complex. Has a sequential branching pattern averaging 4.5 primary branches and 2.5 secondary branches. Produces small two-seeded pods with thin shells, a slight to medium constriction, and a slight to medium reticulation. Seeds are tan, average 33.9g/100 sd in Malawi and 38.0g/100 sd in Uganda with no fresh seed dormancy. Typically, seed has an oil content of 43% and averages 27% protein. The average shelling percentage is 73-77% depending on location.

The following were developed by Thomas C. Kilen, USDA, ARS, Soybean Production Research, P.O. Box 196, Stoneville, Mississippi 38776, United States; Pat Donald, USDA-ARS, 605 Airways Blvd, Jackson, Tennessee 38301, United States; Alemu Mengistu, USDA-ARS, Crop Genetics and Production Research Unit, 141 Experiment Station Road, P. O. Box 196, Stoneville, Mississippi 38776-0345, United States. Received 06/21/2005.

PI 639692. Glycine max (L.) Merr.
Breeding. Pureline. D99-2065. GP-321. Pedigree - Bedford (5) x PI 103091. A product of backcrossing program to transfer the Rps1-d gene into a Bedford background. This line has value as a parent because of its resistance to Phytophthora rot and races 3 and 14 of the soybean cyst nematode. It outyielded Bedford significantly. This line will be useful to the research community because it will expand the set of previous releases of Phytophthora rot resistant lines which are near-isogenic to the cultivar Bedford.

The following were developed by Brian W. Diers, University of Illinois, Department of Crop Sciences, 1102 S. Goodwin Ave., Urbana, Illinois 61801, United States; J.F. Boyse, Michigan State University, Dept. of Crop and Soil Sci., East Lansing, Michigan 48824, United States; Dechun Wang, Michigan State University, Department of Crop and Soil Sciences, A384-E Plant and Soil Science Building, East Lansing, Michigan 48824-1325, United States. Received 06/17/2005.

PI 639693. Glycine max (L.) Merr.
Cultivar. Pureline. "Skylla". CV-479. Pedigree - Dairyland `DSR-217' x Syngenta (formerly Novartis) S19-90. A late Maturity Group II soybean cultivar (2.6 rm) with indeterminate growth habit, purple flowers, tawny pubescence, and tan pods at maturity. The mature seeds have a yellow seed coat with dull luster, black hilum, and yellow cotyledons. Over three years of Group II Tests it had an average yield of 3467 kg/ ha, compared with 3353 kg/ha for the check cultivar IA2021. In the same tests, it matured 3.9 days later, had a better lodging score, and was 10 cm taller than IA2021. Averaged 148 mg/seed, 371 g/kg seed protein, and 208 g/kg seed oil content on a dry weight basis. In the same tests, the check cultivar IA 2021 averaged 154 mg/seed, 379 g/kg seed protein, and 218 g/kg seed oil content. In the Michigan South Conventional Soybean Variety Trials it had the highest yield average in the trials. It is

resistant to Phytophthora sojae race 7 but susceptible to race 4. In the North Central White Mold Uniform Test, the average disease severity index was 48.5, compared with 44.1 for the partially resistant check cultivar Syngenta S19-90. It is best adapted to 41 degrees to 44degrees N lat.

The following were developed by Jerome D. Franckowiak, North Dakota State University, Department of Plant Sciences, P.O. Box 5051, Fargo, North Dakota 58105-5051, United States; Richard D. Horsley, North Dakota State University, Department of Plant Sciences, 166 Loftsgard Hall, Fargo, North Dakota 58105-5051, United States; P.B. Schwarz, North Dakota State University, Dept. of Cereal Science, Fargo, North Dakota 58105-5051, United States; Stephen Neate, North Dakota State University, Department of Plant Pathology, 353 Walster Hall, Fargo, North Dakota 58105, United States. Received 06/15/2005.

PI 639694. Hordeum vulgare L. **subsp. vulgare**
Cultivar. Pureline. "STELLAR-ND"; ND16301. PVP 200500278; CV-322. Pedigree - Foster//ND12200/6B88-3213. Semi-smooth awns, covered kernels, long-rachilla hairs, and white aleurone. Three cm shorter and heads similar to Drummond. Has stronger straw and yields about 8% more than Robust. Resistant to spot blotch and prevalent pathotypes of wheat stem rust except Pgt-QCC, moderately susceptible to net blotch and susceptible to loose smut.

The following were collected by Gulnara Sitpaeva, Institute of Botany, Department of Plan Resources, Almaty, Kazakhstan; Kenebay Kozhakhmetov, Kazakhstan Research Institute of Farming, Wide Crossed and Cytology Department, Almaty, Kazakhstan; M. Yessimbekova, Genetic Resources Unit, Scientific Production Center of Farming and Crop Research, Almaty, Kazakhstan. Received 12/09/2003.

PI 639695. Hordeum brevisubulatum (Trin.) Link
Wild. K2003-31; NGRL 390. Collected 08/06/2003 in Kazakhstan. Latitude 44° 16' 37" N. Longitude 79° 25' 57" E. Elevation 1298 m. Almaty province, Panfilov county, Koktal-Saryosek, village Konyr-olen. Altyn-Emel mountains, near river Koktere. Clay, stoney soil. Good drainage. Graminea dry steppe. Stipa lessingiana, Artemisia scoparia, Peganum harmala, Ceratocarpus arenaria, Corex physoides, Acroptilon repens, Descurainia sophia & others. Perennial; height 30-25 cm; stem erect, naked, pubescent at internodes; leaf sheath naked, smooth; leaf narrow linear, cauline, 24 mm wide, bottom leaves narrower; spike narrow linear, 4-9 sm long, 3-5 mm wide, vulnerable rachis.

PI 639696. Hordeum brevisubulatum (Trin.) Link
Wild. K2003-121; NGRL 479. Collected 08/13/2003 in Kazakhstan. Latitude 49° 11' 16" N. Longitude 85° 25' 42" E. Elevation 880 m. East Kazakhstan, county Katon-Karagai, between villages Katon and Chingiztai. Sarymskty mountains, foothills. Serozem soil; good drainage. Graminae-grass mixture. Sanguisorba officinalis, Agropyron cristatum, Stipa capillata, Acnatherum splendens, Scabiosa isetensis, Phlomis tuberosa, Dactylis glomerata, and others. Perennial; height 80-25 cm; stem erect, naked, pubescent at internodes; leaf sheath naked, smooth; leaf narrow-linear cauline, 24 mm wide bottom leaves narrower; spike narrow-linear 4-9 cm long, 3-5 mm wide vulnerable rachis.

The following were collected by E.L. Smith, USDA, ARS, 1301 N. Western St., Stillwater, Oklahoma 74075, United States. Received 03/1970.

PI 639697. Triticum turgidum subsp. durum (Desf.) Husn.
Cultivated. ELS 6404-93; NSGC 9523. Collected 01/15/1964 in Harer, Ethiopia. Latitude 9° 29' N. Longitude 42° 14' E. Elevation 2316 m. Ejersa Goro. Pedigree - Seperated from CItr 14694.

The following were collected by Consiglio Nazionale delle Ricerche, Instituto del Germoplasma, Via G. Amendola, 165A, Bari, Apulia 70126, Italy. Received 05/1982.

PI 639698. Triticum turgidum subsp. durum (Desf.) Husn.
Cultivated. MG 27027; NSGC 9524. Collected in Greece. Latitude 39° 0' N. Longitude 22° 0' E. Pedigree - Separated from PI 468979.

PI 639699. Triticum turgidum subsp. durum (Desf.) Husn.
Cultivated. MG 27054; NSGC 9525. Collected in Greece. Latitude 39° 0' N. Longitude 22° 0' E. Pedigree - Separated from PI 469000.

PI 639700. Triticum turgidum subsp. durum (Desf.) Husn.
Cultivated. MG 27063; NSGC 9526. Collected in Greece. Latitude 39° 0' N. Longitude 22° 0' E. Pedigree - Separated from PI 469007.

PI 639701. Triticum turgidum subsp. durum (Desf.) Husn.
Cultivated. MG 27071; NSGC 9527. Collected in Greece. Latitude 39° 0' N. Longitude 22° 0' E. Pedigree - Separated from PI 469015.

The following were developed by Jeff Pedersen, USDA, ARS, University of Nebraska, Department of Agronomy, Lincoln, Nebraska 68583-0937, United States; John J. Toy, USDA, ARS, University of Nebraska-Lincoln, Dept. of Agronomy, Lincoln, Nebraska 68583-0937, United States; Deanna Funnell, USDA-ARS, University of Nebraska, 314 BioChem - UNL, East Campus, Lincoln, Nebraska 68583-0737, United States; A.L. Oliver, University of Nebraska-Lincoln, Dept. of Animal Science, Lincoln, Nebraska 68583-0908, United States; R.J. Grant, W.H. Miner Agric. Res. Institute, Chazy, New York 12921, United States. Received 06/15/2005.

PI 639702. Sorghum bicolor (L.) Moench **subsp. bicolor**
Genetic. Pureline. N592. GS-121. Pedigree - The recurrent parents Atlas, Kansas Collier, Rox Orange, and Early Hegari-Sart were crossed to brown midrib sources N121 (bmr-6) and F220 (bmr-12), followed by a minimum of four cycles of selfing and backcrossing. The lines were then selfed and advanced head-to-row for four generations to fix the brown midrib genes in the homozygous recessive condition (bmr-6 bmr-6 or bmr-12 bmr-12) and the male-sterility loci in the male-fertile condition (Ms3 Ms3). Release of these genetic stocks makes brown midrib genes known to reduce activity of two specific enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyltransferase (bmr-12) available in diverse near-isogenic forage sorghum. All of these seven genetic stocks closely resemble their recurrent parent. Because of the presence of a high-tannin testa layer in seed direct increase and use of these genetic stocks as cultivars is strongly discouraged.

PI 639703. Sorghum bicolor (L.) Moench **subsp. bicolor**
Genetic. Pureline. N593. GS-122. Pedigree - The recurrent parents Atlas, Kansas Collier, Rox Orange, and Early Hegari-Sart were crossed to brown midrib sources N121 (bmr-6) and F220 (bmr-12), followed by a minimum of four cycles of selfing and backcrossing. The lines were then selfed and advanced head-to-row for four generations to fix the brown midrib genes in the homozygous recessive condition (bmr-6 bmr-6 or bmr-12 bmr-12) and the male-sterility loci in the male-fertile condition (Ms3 Ms3). Release of these genetic stocks makes brown midrib genes known to reduce activity of two specific enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyltransferase (bmr-12) available in diverse near-isogenic forage sorghum. All of these seven genetic stocks closely resemble their recurrent parent. Because of the presence of a high-tannin testa layer in seed direct increase and use of these genetic stocks as cultivars is strongly discouraged.

PI 639704. Sorghum bicolor (L.) Moench **subsp. bicolor**
Genetic. Pureline. N594. GS-123. Pedigree - The recurrent parents Atlas, Kansas Collier, Rox Orange, and Early Hegari-Sart were crossed to brown midrib sources N121 (bmr-6) and F220 (bmr-12), followed by a minimum of four cycles of selfing and backcrossing. The lines were then selfed and advanced head-to-row for four generations to fix the brown midrib genes in the homozygous recessive condition (bmr-6 bmr-6 or bmr-12 bmr-12) and the male-sterility loci in the male-fertile condition (Ms3 Ms3). Release of these genetic stocks makes brown midrib genes known to reduce activity of two specific enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyltransferase (bmr-12) available in diverse near-isogenic forage sorghum. All of these seven genetic stocks closely resemble their recurrent parent. Because of the presence of a high-tannin testa layer in seed direct increase and use of these genetic stocks as cultivars is strongly discouraged.

PI 639705. Sorghum bicolor (L.) Moench **subsp. bicolor**
Genetic. Pureline. N595. GS-124. Pedigree - The recurrent parents Atlas, Kansas Collier, Rox Orange, and Early Hegari-Sart were crossed to brown midrib sources N121 (bmr-6) and F220 (bmr-12), followed by a minimum of four cycles of selfing and backcrossing. The lines were then selfed and advanced head-to-row for four generations to fix the brown midrib genes in the homozygous recessive condition (bmr-6 bmr-6 or bmr-12 bmr-12) and the male-sterility loci in the male-fertile condition (Ms3 Ms3). Release of these genetic stocks makes brown midrib genes known to reduce activity of two specific enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyltransferase (bmr-12) available in diverse near-isogenic forage sorghum. All of these seven genetic stocks closely resemble their recurrent parent. Because of the presence of a high-tannin testa layer in seed direct increase and use of these genetic stocks as cultivars is strongly discouraged.

PI 639706. Sorghum bicolor (L.) Moench **subsp. bicolor**
Genetic. Pureline. N596. GS-125. Pedigree - The recurrent parents Atlas, Kansas Collier, Rox Orange, and Early Hegari-Sart were crossed to brown midrib sources N121 (bmr-6) and F220 (bmr-12), followed by a minimum of four cycles of selfing and backcrossing. The lines were then selfed and advanced head-to-row for four generations to fix the brown midrib genes in the homozygous recessive condition (bmr-6 bmr-6 or bmr-12 bmr-12) and the male-sterility loci in the male-fertile condition (Ms3 Ms3). Release of these genetic stocks makes brown midrib genes known to reduce

activity of two specific enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyltransferase (bmr-12) available in diverse near-isogenic forage sorghum. All of these seven genetic stocks closely resemble their recurrent parent. Because of the presence of a high-tannin testa layer in seed direct increase and use of these genetic stocks as cultivars is strongly discouraged.

PI 639707. Sorghum bicolor (L.) Moench **subsp. bicolor**
Genetic. Pureline. N597. GS-126. Pedigree - The recurrent parents Atlas, Kansas Collier, Rox Orange, and Early Hegari-Sart were crossed to brown midrib sources N121 (bmr-6) and F220 (bmr-12), followed by a minimum of four cycles of selfing and backcrossing. The lines were then selfed and advanced head-to-row for four generations to fix the brown midrib genes in the homozygous recessive condition (bmr-6 bmr-6 or bmr-12 bmr-12) and the male-sterility loci in the male-fertile condition (Ms3 Ms3). Release of these genetic stocks makes brown midrib genes known to reduce activity of two specific enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyltransferase (bmr-12) available in diverse near-isogenic forage sorghum. All of these seven genetic stocks closely resemble their recurrent parent. Because of the presence of a high-tannin testa layer in seed direct increase and use of these genetic stocks as cultivars is strongly discouraged.

PI 639708. Sorghum bicolor (L.) Moench **subsp. bicolor**
Genetic. Pureline. N598. GS-127. Pedigree - The recurrent parents Atlas, Kansas Collier, Rox Orange, and Early Hegari-Sart were crossed to brown midrib sources N121 (bmr-6) and F220 (bmr-12), followed by a minimum of four cycles of selfing and backcrossing. The lines were then selfed and advanced head-to-row for four generations to fix the brown midrib genes in the homozygous recessive condition (bmr-6 bmr-6 or bmr-12 bmr-12) and the male-sterility loci in the male-fertile condition (Ms3 Ms3). Release of these genetic stocks makes brown midrib genes known to reduce activity of two specific enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyltransferase (bmr-12) available in diverse near-isogenic forage sorghum. All of these seven genetic stocks closely resemble their recurrent parent.

PI 639709. Sorghum bicolor (L.) Moench **subsp. bicolor**
Genetic. Pureline. N599. GS-128. Pedigree - The recurrent parents Wheatland, Redlan, RTx430, BTx623, BTx630, and BTx631 were crossed to the brown midrib sources N121 (bmr-6) and F220 or F324 (bmr-12) followed by three to four cycles of selfing then backcrossing. Following the final backcross,the lines were selfed and advanced head-to-row for four generations to fix the brown midrib genes in the homozygous recessive condition (bmr-6 bmr-6 or bmr-12 bmr-12) and the male-sterility genes in the male-fertile condition (Ms3 Ms3). These genetic stocks make brown midrib genes known to reduce activity of two specific enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyltransferase (bmr-12), available in diverse near-isogenic grain sorghum backgrounds. The genetic stocks closely resemble their recurrent parents, with the exception of N605 (Tx630 bmr-6) and N606 (Tx630 bmr-12) which have normal endosperm.

PI 639710. Sorghum bicolor (L.) Moench **subsp. bicolor**
Genetic. Pureline. N600. GS-129. Pedigree - The recurrent parents Wheatland, Redlan, RTx430, BTx623, BTx630, and BTx631 were crossed to the brown midrib sources N121 (bmr-6) and F220 or F324 (bmr-12) followed

by three to four cycles of selfing then backcrossing. Following the final backcross,the lines were selfed and advanced head-to-row for four generations to fix the brown midrib genes in the homozygous recessive condition (bmr-6 bmr-6 or bmr-12 bmr-12) and the male-sterility genes in the male-fertile condition (Ms3 Ms3). These genetic stocks make brown midrib genes known to reduce activity of two specific enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyltransferase (bmr-12), available in diverse near-isogenic grain sorghum backgrounds. The genetic stocks closely resemble their recurrent parents, with the exception of N605 (Tx630 bmr-6) and N606 (Tx630 bmr-12) which have normal endosperm.

PI 639711. Sorghum bicolor (L.) Moench **subsp. bicolor**
Genetic. Pureline. N601. GS-130. Pedigree - The recurrent parents Wheatland, Redlan, RTx430, BTx623, BTx630, and BTx631 were crossed to the brown midrib sources N121 (bmr-6) and F220 or F324 (bmr-12) followed by three to four cycles of selfing then backcrossing. Following the final backcross,the lines were selfed and advanced head-to-row for four generations to fix the brown midrib genes in the homozygous recessive condition (bmr-6 bmr-6 or bmr-12 bmr-12) and the male-sterility genes in the male-fertile condition (Ms3 Ms3). These genetic stocks make brown midrib genes known to reduce activity of two specific enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyltransferase (bmr-12), available in diverse near-isogenic grain sorghum backgrounds. The genetic stocks closely resemble their recurrent parents, with the exception of N605 (Tx630 bmr-6) and N606 (Tx630 bmr-12) which have normal endosperm.

PI 639712. Sorghum bicolor (L.) Moench **subsp. bicolor**
Genetic. Pureline. N602. GS-131. Pedigree - The recurrent parents Wheatland, Redlan, RTx430, BTx623, BTx630, and BTx631 were crossed to the brown midrib sources N121 (bmr-6) and F220 or F324 (bmr-12) followed by three to four cycles of selfing then backcrossing. Following the final backcross,the lines were selfed and advanced head-to-row for four generations to fix the brown midrib genes in the homozygous recessive condition (bmr-6 bmr-6 or bmr-12 bmr-12) and the male-sterility genes in the male-fertile condition (Ms3 Ms3). These genetic stocks make brown midrib genes known to reduce activity of two specific enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyltransferase (bmr-12), available in diverse near-isogenic grain sorghum backgrounds. The genetic stocks closely resemble their recurrent parents, with the exception of N605 (Tx630 bmr-6) and N606 (Tx630 bmr-12) which have normal endosperm.

PI 639713. Sorghum bicolor (L.) Moench **subsp. bicolor**
Genetic. Pureline. N603. GS-132. Pedigree - The recurrent parents Wheatland, Redlan, RTx430, BTx623, BTx630, and BTx631 were crossed to the brown midrib sources N121 (bmr-6) and F220 or F324 (bmr-12) followed by three to four cycles of selfing then backcrossing. Following the final backcross,the lines were selfed and advanced head-to-row for four generations to fix the brown midrib genes in the homozygous recessive condition (bmr-6 bmr-6 or bmr-12 bmr-12) and the male-sterility genes in the male-fertile condition (Ms3 Ms3). These genetic stocks make brown midrib genes known to reduce activity of two specific enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyltransferase (bmr-12), available in diverse near-isogenic grain sorghum backgrounds. The genetic stocks closely resemble their recurrent

parents, with the exception of N605 (Tx630 bmr-6) and N606 (Tx630 bmr-12) which have normal endosperm.

PI 639714. Sorghum bicolor (L.) Moench **subsp. bicolor**
Genetic. Pureline. N604. GS-133. Pedigree - The recurrent parents Wheatland, Redlan, RTx430, BTx623, BTx630, and BTx631 were crossed to the brown midrib sources N121 (bmr-6) and F220 or F324 (bmr-12) followed by three to four cycles of selfing then backcrossing. Following the final backcross,the lines were selfed and advanced head-to-row for four generations to fix the brown midrib genes in the homozygous recessive condition (bmr-6 bmr-6 or bmr-12 bmr-12) and the male-sterility genes in the male-fertile condition (Ms3 Ms3). These genetic stocks make brown midrib genes known to reduce activity of two specific enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyltransferase (bmr-12), available in diverse near-isogenic grain sorghum backgrounds. The genetic stocks closely resemble their recurrent parents, with the exception of N605 (Tx630 bmr-6) and N606 (Tx630 bmr-12) which have normal endosperm.

PI 639715. Sorghum bicolor (L.) Moench **subsp. bicolor**
Genetic. Pureline. N605. GS-134. Pedigree - The recurrent parents Wheatland, Redlan, RTx430, BTx623, BTx630, and BTx631 were crossed to the brown midrib sources N121 (bmr-6) and F220 or F324 (bmr-12) followed by three to four cycles of selfing then backcrossing. Following the final backcross,the lines were selfed and advanced head-to-row for four generations to fix the brown midrib genes in the homozygous recessive condition (bmr-6 bmr-6 or bmr-12 bmr-12) and the male-sterility genes in the male-fertile condition (Ms3 Ms3). These genetic stocks make brown midrib genes known to reduce activity of two specific enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyltransferase (bmr-12), available in diverse near-isogenic grain sorghum backgrounds. The genetic stocks closely resemble their recurrent parents, with the exception of N605 (Tx630 bmr-6) and N606 (Tx630 bmr-12) which have normal endosperm.

PI 639716. Sorghum bicolor (L.) Moench **subsp. bicolor**
Genetic. Pureline. N606. GS-135. Pedigree - The recurrent parents Wheatland, Redlan, RTx430, BTx623, BTx630, and BTx631 were crossed to the brown midrib sources N121 (bmr-6) and F220 or F324 (bmr-12) followed by three to four cycles of selfing then backcrossing. Following the final backcross,the lines were selfed and advanced head-to-row for four generations to fix the brown midrib genes in the homozygous recessive condition (bmr-6 bmr-6 or bmr-12 bmr-12) and the male-sterility genes in the male-fertile condition (Ms3 Ms3). These genetic stocks make brown midrib genes known to reduce activity of two specific enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyltransferase (bmr-12), available in diverse near-isogenic grain sorghum backgrounds. The genetic stocks closely resemble their recurrent parents, with the exception of N605 (Tx630 bmr-6) and N606 (Tx630 bmr-12) which have normal endosperm.

PI 639717. Sorghum bicolor (L.) Moench **subsp. bicolor**
Genetic. Pureline. N607. GS-136. Pedigree - The recurrent parents Wheatland, Redlan, RTx430, BTx623, BTx630, and BTx631 were crossed to the brown midrib sources N121 (bmr-6) and F220 or F324 (bmr-12) followed by three to four cycles of selfing then backcrossing. Following the final backcross,the lines were selfed and advanced head-to-row for four

generations to fix the brown midrib genes in the homozygous recessive condition (bmr-6 bmr-6 or bmr-12 bmr-12) and the male-sterility genes in the male-fertile condition (Ms3 Ms3). These genetic stocks make brown midrib genes known to reduce activity of two specific enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyltransferase (bmr-12), available in diverse near-isogenic grain sorghum backgrounds. The genetic stocks closely resemble their recurrent parents, with the exception of N605 (Tx630 bmr-6) and N606 (Tx630 bmr-12) which have normal endosperm.

PI 639718. Sorghum bicolor (L.) Moench **subsp. bicolor**
Genetic. Pureline. N608. GS-137. Pedigree - The recurrent parents Wheatland, Redlan, RTx430, BTx623, BTx630, and BTx631 were crossed to the brown midrib sources N121 (bmr-6) and F220 or F324 (bmr-12) followed by three to four cycles of selfing then backcrossing. Following the final backcross,the lines were selfed and advanced head-to-row for four generations to fix the brown midrib genes in the homozygous recessive condition (bmr-6 bmr-6 or bmr-12 bmr-12) and the male-sterility genes in the male-fertile condition (Ms3 Ms3). These genetic stocks make brown midrib genes known to reduce activity of two specific enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyltransferase (bmr-12), available in diverse near-isogenic grain sorghum backgrounds. The genetic stocks closely resemble their recurrent parents, with the exception of N605 (Tx630 bmr-6) and N606 (Tx630 bmr-12) which have normal endosperm.

PI 639719. Sorghum bicolor (L.) Moench **subsp. bicolor**
Genetic. Pureline. N609. GS-138. Pedigree - The recurrent parents Wheatland, Redlan, RTx430, BTx623, BTx630, and BTx631 were crossed to the brown midrib sources N121 (bmr-6) and F220 or F324 (bmr-12) followed by three to four cycles of selfing then backcrossing. Following the final backcross,the lines were selfed and advanced head-to-row for four generations to fix the brown midrib genes in the homozygous recessive condition (bmr-6 bmr-6 or bmr-12 bmr-12) and the male-sterility genes in the male-fertile condition (Ms3 Ms3). These genetic stocks make brown midrib genes known to reduce activity of two specific enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyltransferase (bmr-12), available in diverse near-isogenic grain sorghum backgrounds. The genetic stocks closely resemble their recurrent parents, with the exception of N605 (Tx630 bmr-6) and N606 (Tx630 bmr-12) which have normal endosperm.

PI 639720. Sorghum bicolor (L.) Moench **subsp. bicolor**
Genetic. Pureline. N610. GS-139. Pedigree - The recurrent parents Wheatland, Redlan, RTx430, BTx623, BTx630, and BTx631 were crossed to the brown midrib sources N121 (bmr-6) and F220 or F324 (bmr-12) followed by three to four cycles of selfing then backcrossing. Following the final backcross,the lines were selfed and advanced head-to-row for four generations to fix the brown midrib genes in the homozygous recessive condition (bmr-6 bmr-6 or bmr-12 bmr-12) and the male-sterility genes in the male-fertile condition (Ms3 Ms3). These genetic stocks make brown midrib genes known to reduce activity of two specific enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyltransferase (bmr-12), available in diverse near-isogenic grain sorghum backgrounds. The genetic stocks closely resemble their recurrent parents, with the exception of N605 (Tx630 bmr-6) and N606 (Tx630 bmr-12) which have normal endosperm.

The following were developed by James S. Beaver, University of Puerto Rico, Mayaguez Camp, Department of Agronomy & Soils, P. O. Box 9030, Mayaguez, Puerto Rico; Shree P. Singh, University of Idaho, Kimberly Research & Extension Ctr., 3793 North 3600 East, Kimberly, Idaho 83341-5076, United States; J.C. Nin, Centro de Investigacion Agricola del Suroeste (CIAS), Km 5 Carretera San Juan-Las Matas, San Juan De La Magua, Dominican Republic; Matthew Blair, Centro Internacional de Agricultura Tropical, A.A. 6713, Cali, Colombia; E. Prophete, Ministry of Agriculture, National Seed Program, Port Au Prince, Haiti. Received 06/23/2005.

PI 639721. Phaseolus vulgaris L.
Breeding. Pureline. PR9745-232. GP-242. Pedigree - Indeterminate Jamaica Red/PR9180-25C//DOR 482/PR9231-94. A red mottled common bean, it has resistance to Bean golden yellow mosaic virus, suggested by the presence of the SCAR marker SR2 confirming the presence of the recessive allele bgm-1. Also resistant to rust. The presence of the SCAR marker SW13 sugg ests the I allele for resistance to Bean common mosaic virus is present. Has a seed type typical of the Pompadour red mottled dry bean market class with a 100-seed weight of 30.2 g. Has an indeterminate Type III growth habit, flowers at 35 d and reaches harvest maturity at 71 d after planting in Puerto Rico.

The following were donated by Rosemary Chng, International Plant Genetic Resouces Institute, Seed Handling Unit, National University of Singapore, Dept. of Botany, Singapore. Received 09/09/1996.

PI 639722. Abelmoschus tuberculatus Pal & Singh
Uncertain. T89/O-155; IC 90356; Grif 12712. Collected in Gujarat, India. Surat, Surat.

The following were donated by D. D. Dolan, USDA, ARS, Regional Plant Introduction Station, New York Agricultural Experiment Sta., Geneva, New York 14456, United States. Received 02/06/1982.

PI 639723. Lagenaria siceraria (Molina) Standl.
Cultivar. "Cucuzzi Hart Lot #34-311"; SI 7937; G 26759; Grif 14234.

The following were developed by Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States; Carl A. Griffey, Virginia Polytechnic Institute, & State University, Dept. of Crop & Soil Env. Sciences, Blacksburg, Virginia 24061-0404, United States; Sue Cambron, USDA-ARS, 901 W. State St., Purdue University, West Lafayette, Indiana 47907, United States; Harold E. Bockelman, USDA, ARS, National Small Grains Collection, 1691 S 2700 W, Aberdeen, Idaho 83210, United States; D.L. Long, USDA, ARS, Cereal Disease Lab, St. Paul, Minnesota, United States; R.J. Kratochvil, University of Maryland, Maryland Agric. Exp. Station, College Park, Maryland 20742, United States; Arvydas Grybauskas, University of Maryland, Dept Natural Resource Sciences, 2102 Plant Science Bldg., College Park, Maryland 20742-4452, United States; Jose Costa, University of Maryland, PSLA Department, Plant Sciences Bldg. Room 2102, College Park, Maryland 20742-4452, United States; Lynda Whitcher, USDA-ARS, North Carolina State University, Dept. of Plant Pathology, Raleigh, North Carolina 27695, United

States; Xianming Chen, USDA-ARS, WSU - Wheat Genetics Unit, PO Box 646430, Pullman, Washington 99164-6430, United States; A. Cooper, University of Maryland, Dept. of Natural Resource Sciences and Landscape, Architecture, College Park, Maryland 20742-4452, United States; E. Shirley, University of Maryland, Dept. of Natural Resource Sciences and Landscape, Architecture, College Park, Maryland 20742-4452, United States; C. Gaines, USDA-ARS, Soft Wheat Quality Lab, Wooster, Ohio 44691, United States. Received 06/22/2005.

PI 639724. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "CHOPTANK"; MD 11-52. CV-976. Pedigree - Coker 9803/Freedom. Released 2004. An early-heading, short wheat that has performed well in DELMARVA. Has excellent resistance to powdery mildew. In four years of testing it has consistently ranked among the top yielding genotypes for grain yield, similar to Sisson and SS550 in MD. In VA, average grain yields of 80 bu/ac were similar to those of McCormick and Sisson, and 4 to 6 bu/acre higher than Pioneer 2580 and USG3209. In DE trials it ranked high for grain yield as well. Average test weight was 56.6 lbs/bu, slightly higher than Sisson and SS550 but lower than McCormick and Roane. Milling quality is good and superior to that of Roane and similar or slightly better than its sister line SS 550. Grain of Choptank produces more flour than Roane and Pioneer 2580 and is similar to SS 550 in texture but softer than Roane and Coker 9663. Baking quality is excellent and superior to stringent checks such as Pocahontas or Sisson. Flour absorbs less water and produces larger cookies than Roane, Pocahontas and Sisson.

The following were developed by Richard Wang, USDA-ARS, Forage & Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 06/22/2005.

PI 639725. Thinopyrum hybrid
Genetic. Population. TBTE001. GS-1. Pedigree - Thinopyrum bessarabicum (PI 531710 and PI 531711) X Th. elongatum (PI 531719). The diploid hybrids were treated with colchicine to double the chromosome number for restoring fertility. Fertile amphidiploid plants were open-pollinated to advance generations. This is composed of bulk seed from four green-leaf plants of the C2 amphidiploids. Seed of amphidiploid plants are larger than those of diploid parents; the thousand seed weight is 8.6 g whereas it is 3.5 g for the parents. Progenies will be segregating for leaf glaucousness.

PI 639726. Thinopyrum hybrid
Genetic. Population. TBTE002. GS-2. Pedigree - Thinopyrum bessarabicum (PI 531710 and PI 531711) X Th. elongatum (PI 531719). The diploid hybrids were treated with colchicine to double the chromosome number for restoring fertility. Fertile amphidiploid plants were open-pollinated to advance generations. This is composed of bulk seed from seven blue-leaf plants of the C2 amphidiploids that were isolated from green-leaf plants and allowed to inter-cross among them. Seed of amphidiploid plants is larger than those of diploid parents; the thousand seed weight is 6.7 g whereas it is 3.5 g for the parents. Progenies will be all blue-leaf plants, i.e., homozygous recessive for leaf glaucousness.

The following were donated by Rosemary Chng, International Plant Genetic Resouces Institute, Seed Handling Unit, National University of Singapore, Dept. of Botany, Singapore. Received 09/09/1996.

PI 639727. Abelmoschus ficulneus (L.) Wight & Arn.
Uncertain. T89/O-65; IC 90437; Grif 12750. Collected in Gujarat, India. Upleta, Rajkot.

PI 639728. Abelmoschus tuberculatus Pal & Singh
Uncertain. T89/O-159; IC 90360; Grif 12715. Collected in Gujarat, India. Surat, Surat.

The following were developed by Richard C. Frohberg, North Dakota State University, Crop & Weed Science Department, P.O. Box 5051, Fargo, North Dakota 58105-5051, United States; J.B. Rasmussen, North Dakota State University, Dept. of Plant Pathology, Fargo, North Dakota 58105, United States; James D. Miller, USDA-ARS, Dept. of Plant Pathology, North Dakota State University, Fargo, North Dakota, United States; Mohamed Mergoum, North Dakota State University, Plant Sciences Dept., Loftsgard Hall, Fargo, North Dakota 58105-5051, United States; S. Ali, North Dakota State University, Dep. of Plant Pathology, P.O. Box 5051, Fargo, North Dakota 58105, United States; P.K. Singh, North Dakota State University, Dep. of Plant Sciences, P.O. Box 5051, Fargo, North Dakota 58105, United States. Received 07/01/2005.

PI 639729. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. ND 735. GP-800. Pedigree - ND 2907/3/Grandin*3//Ramsey/ND 622/4/ND 2809. Combines high level of resistance to prevalent races of tan spot and resistance to the dominant races of stem rust and leaf rust. Also moderate resistant to Fusarium Head Blight (FHB) and has good agronomic performance. Resistant to moderate resistant to all five tan spot races, similar to Erik and Salamouni resistant checks. Is insensitive to Ptr Tox A toxin. Has moderate resistance to septoria nodorum leaf blotch. Resistance level to FHB is higher than the susceptible checks B331 and 2398 but less than Alsen. Resistant to pathotype THBL, the predominant race of leaf rust and highly resistant to the stem rust pathotypes Pgt-QCCJ, -QTHJ, -QFCQ, -RTQQ, -TPMK, -RHTS, and -HPHJ. An awned, medium-early maturing and semi-dwarf wheat. It has a lax head type with plant height 5 cm shorter than Parshall and 9 cm taller Alsen. Earlier than Alsen, but its maturity is similar to Reeder and Parshall. It is similar to Alsen for grain shattering and straw strength, but more resistant to grain shatte ring than Sumai3. Grain yield of ND 735 is comparable to Reeder. Grain volume and protein of were respectively superior to Butte 86 but less than Parshall. Water absorption is similar to Reeder and Alsen. Mixogram mix time is higher than Reeder and Alsen but mixing tolerance was lower than Alsen and Parshall, but higher than Reeder. Loaf volume is comparable to Parshall and the flour yield of is less than Parshall.

The following were developed by Xiwen Cai, North Dakota State University, Department of Plant Sciences, Loftsgard Hall, Fargo, North Dakota 58105-5051, United States; Steven Xu, USDA-ARS, Northern Crop Science Laboratory, 1307 18th St. North, Fargo, North Dakota 58105-5677, United States; Tao Wang, North Dakota State University, Department of Plant Science, Loftsgard Hall 236, Fargo, North Dakota 58102, United States; Tim Friesen, USDA-ARS, 1307 N. 18th St., Fargo, North Dakota 58105, United States; M.O. Harris, North Dakota

State University, Dept. of Entomology, Fargo, North Dakota 58105, United States. Received 06/29/2005.

PI 639730. X Aegilotriticum sp.
Breeding. Pureline. SW8. GP-803. Pedigree - Langdon/Aegilops tauschii CIae 25. Released 2004. Spring-type wheat and resistant to Great Plains (GP) biotype and a H13-virulent strain of Hessian fly. It is resistant to stem rust and moderately resistant to tan spot], but susceptible to Fusarium head blight and Stagonospora nodorum blotch. Plants are tall, averaging 109 cm and late in maturity. Spikes are long with long rachis internodes.

The following were developed by Steven Xu, USDA-ARS, Northern Crop Science Laboratory, 1307 18th St. North, Fargo, North Dakota 58105-5677, United States. Received 06/29/2005.

PI 639731. X Aegilotriticum sp.
Breeding. Pureline. SW34. Pedigree - Langdon/Aegilops tauschii RL5544. Spring-type wheat. Resistant to Great Plains (GP) biotype but susceptible to a H13-virulent strain of Hessian fly. It is resistant to stem rust and moderately resistant to tan spot, but susceptible to Fusarium head blight. Has normal plant growth at the seedling stage, but it exhibited hybrid chlorosis at later stages. Chlorotic mottles usually appeared on older leaves and leaf sheaths after plants started the erect growth (about four weeks post planting). As plants grew, chlorosis gradually expanded to upper and younger leaves and sheaths. After the flowering stage, chlorosis gradually progressed to the whole plant and caused leaves and sheaths to senesce prior to plant maturity. The seeds were usually shriveled but viable. It averaged 81.6 cm in plant height.

The following were developed by Xiwen Cai, North Dakota State University, Department of Plant Sciences, Loftsgard Hall, Fargo, North Dakota 58105-5051, United States; Steven Xu, USDA-ARS, Northern Crop Science Laboratory, 1307 18th St. North, Fargo, North Dakota 58105-5677, United States; Tao Wang, North Dakota State University, Department of Plant Science, Loftsgard Hall 236, Fargo, North Dakota 58102, United States; Tim Friesen, USDA-ARS, 1307 N. 18th St., Fargo, North Dakota 58105, United States; M.O. Harris, North Dakota State University, Dept. of Entomology, Fargo, North Dakota 58105, United States. Received 06/29/2005.

PI 639732. X Aegilotriticum sp.
Breeding. Pureline. SW39. GP-804. Pedigree - Langdon/Aegilops tauschii RL5561. Released 2004. Spring-type wheat and it is resistant to Great Plains (GP) biotype but susceptible to a H13-virulent strain of Hessian fly. It is resistant to stem rust and moderately resistant to tan spot, but susceptible to Fusarium head blight. It has normal plant growth and averaged 83.2 cm in plant height.

The following were developed by Seminis Vegetable Seeds, Inc., United States. Received 07/08/2005.

PI 639733. Daucus carota subsp. sativus (Hoffm.) Arcang.
Cultivar. PJ714902. PVP 200500289.

PI 639734 PVPO. Solanum lycopersicum L.
Cultivar. FIR 18-2051. PVP 200500270.

PI 639735 PVPO. Solanum lycopersicum L.
Cultivar. FIR 18-2024. PVP 200500271.

The following were developed by Double J Ranch, Inc., Okanogan, Washington, United States. Received 07/08/2005.

PI 639736 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "Rjames". PVP 200500287.

PI 639737 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "George". PVP 200500288.

The following were developed by Syngenta Seeds, Inc., United States; AgriPro Wheat, Junction City, Kansas, United States. Received 07/08/2005.

PI 639738 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "HBK 3266"; L96*9266-1. PVP 200500272; PVP 200600027 . Pedigree - Bow sib/Pio2548//Coker87-13wh.

The following were developed by Monsanto Company, Creve Coeur, Missouri 63167, United States. Received 07/08/2005.

PI 639739 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "Neosho". PVP 200500273. Pedigree - W91-376-20/W95-084.

The following were developed by Dennis Thomas, University of Illinois, Department of Crop Sciences, 1102 S. Goodwin Avenue, Urbana, Illinois 61801, United States; Cecil D. Nickell, University of Illinois, Department of Crop Sciences, 262 NSRC, Urbana, Illinois 61801, United States; T.R. Cary, University of Illinois, Illinois Agr. Exp. Sta., Dept. of Agronomy, Urbana, Illinois 61801, United States; Brian W. Diers, University of Illinois, Department of Crop Sciences, 1102 S. Goodwin Ave., Urbana, Illinois 61801, United States. Received 07/13/2005.

PI 639740. Glycine max (L.) Merr.
Cultivar. Pureline. "LD00-3309"; SY 514001. CV-480. Pedigree - LD00-3309 originated as an F4 plant selection from the cross 'Maverick' x 'Dwight' made at the Illinois Agricultural Experiment Station. LD00-3309 is an indeterminate line classified as having a mid group IV maturity (relative maturity 4.5). Compared to LN97-15076 in 25 locations of the 2004 group IV uniform tests, LD00-3309 matured one day later, yielded 13% more (4,441 kg/ha vs. 3,924 kg/ha), was 8 cm shorter, and lodged 0.4 units less. Across nine locations, LD00-3309 had 21 g/kg less seed protein (394 vs. 415 g/kg) and 4 g/kg greater seed oil (196 vs. 192 g/kg). Compared with LS93-0375 in the same locations, LD00-3309 matured the same day, yielded 6% more, was 2 cm shorter, had the same lodging, and had 14 g/kg less seed protein and 6 g/kg greater seed oil. Compared with Macon across 39 locations of the 2003-2004 uniform tests, LD00-3309 matured 5 days later, yielded 14% more (4280 g/kg vs. 3742 g/kg), was 2

cm taller, and had 0.1 unit less lodging. Across 15 locations of these tests, LD00-3309 had 5 g/kg less seed protein (389 g/kg vs. 394 g/kg) and 3 g/kg less seed oil (200 g/kg vs. 203 g/kg). LD00-3309 has purple flowers, tawny pubescence, brown pod color at maturity, and dull yellow seeds with black hila. LD00-3309 is susceptible to phytophthora rot (Races 4 and 7) (caused by Phytophthora sojae M.L. Kaufmann & J.W. Gerdemann), and resistance to Race 3 (HG Type 0) of soybean cyst nematode. LD00-3309 had moderate resistance to sudden death syndrome. Across eight environments of field tests 2004, the disease index of LD00-3309 was 7, compared to 46 for `Spencer?, a susceptible check, and 3 for 'LS94-3207', a resistant check.

The following were donated by Rosemary Chng, International Plant Genetic Resouces Institute, Seed Handling Unit, National University of Singapore, Dept. of Botany, Singapore. Received 09/09/1996.

PI 639741. Abelmoschus moschatus Medik.
Uncertain. U24-59; Grif 12902. Collected in Uttar Pradesh, India.

The following were developed by Steven D. Linscombe, Louisiana State University, LSU Rice Experiment Station, 1373 Caffey Road, Rayne, Louisiana 70578, United States; L.M. White, Louisiana State University, Rice Research Station, P.O. Box 1429, Crowley, Louisiana 70527-1429, United States; Richard Dunand, Louisiana State University, Rice Research Station, 1373 Caffey Road, Rayne, Louisiana 70578, United States; Xueyan Sha, Louisiana State University, Louisiana Agric. Exp. Station, Rice Research Station, Rayne, Louisiana 70578, United States; Louisiana State University Agricultural Center, Louisiana, United States; Herry Utomo, LSU Ag. Center, Rice Research Station, 1373 Caffey Rd., Rayne, Louisiana 70578, United States; Qiren Chu, RiceTec, Inc., P.O. Box 1305, Alvin, Texas 77512, United States; D.E. Groth, Louisiana State University AgCenter, Rice Research Station, 1373 Caffey Road, Rayne, Louisiana 70578, United States; J.A. Bond, Louisiana State University AgCenter, Rice Research Station, 1373 Caffey Road, Rayne, Louisiana 70578, United States. Received 07/08/2005.

PI 639742. Oryza sativa L.
Cultivar. Pureline. "JUPITER"; LA 2183. PVP 200500285; CV-119. Pedigree - Bengal / Rico 1 / 3 / Bengal // Mercury / Rico 1. Released 2004. High yielding, early maturing and short stature medium-grain rice variety. Moderately resistant to panicle blight and straighthead and has good field resistance to rotten neck blast.

The following were developed by Progeny Advanced Genetics, Inc., Salinas, California, United States. Received 07/08/2005.

PI 639743. Lactuca sativa L.
Cultivar. Pureline. "Sturgis". PVP 200500286.

The following were developed by Ag Biotech of Oregon, Inc., Oregon, United States. Received 07/08/2005.

PI 639744 PVPO. Dactylis glomerata L.
Cultivar. "Potomac II". PVP 200500268.

The following were developed by Oregon State University, Oregon Agriculture Experiment Station, Corvallis, Oregon 97331, United States. Received 07/08/2005.

PI 639745 PVPO. Limnanthes alba Hartw. ex Benth.
Cultivar. "Starlight". PVP 200500279.

The following were developed by Enza Zaden Beheer B.V., Netherlands. Received 07/08/2005.

PI 639746 PVPO. Lactuca sativa L.
Cultivar. "Tassajara". PVP 200500284.

The following were developed by D&PL Technology Holding Company, LLC, Scott, Mississippi, United States. Received 07/08/2005.

PI 639747 PVPO. Gossypium hirsutum L.
Cultivar. "06CX212R";. PVP 200500274.

PI 639748 PVPO. Gossypium hirsutum L.
Cultivar. "06CX924BR";. PVP 200500275.

PI 639749 PVPO. Gossypium hirsutum L.
Cultivar. "06CX2S6DR";. PVP 200500276.

The following were donated by J. Mattatia, Agricultural Research Organization, Department of Plant Introduction, P.O. 6, Bet-Dagan, Central, Israel. Received 10/30/1984.

PI 639750. Dasypyrum villosum (L.) P. Candargy
Wild. JM 3972; W6 7314; SACCOTRIFI. Collected 08/03/1984 in Greece. Plants growing on batha and roadside on moderate slope of sand and loam, low stones and good drainage, 1km from Amykles, east of road from Sparta to Oythio. Plants growing with Coridothymus capitatus, Spartium junceum, Carthamus spp., Pyrus amygdaliformis, Hypparhenia hirta, Asphodelus aestivus, Eryngium campestre, Onopordum spp. and Verbascum spp.

PI 639751. Dasypyrum villosum (L.) P. Candargy
Wild. JM 3983; W6 7316. Collected 08/03/1984 in Greece. Elevation 240 m. Plants growing on slope of Mt. Taigetos, 1km from Gorani in loam, medium stones and good drainage, near road from Gorani to Dafni, Laconia, Peloponissos. Plants growing with Cercus siliquestrum, Hordeum bulbosum, Smyrnium spp., Centaurea spp., Citrus spp., cultivated olives, annual and perennial grasses and herbs.

The following were collected by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 11/02/1993.

PI 639752. Elymus caninus (L.) L.
Wild. X93215; W6 13120. Collected 08/21/1993 in Xinjiang, China. Latitude 43° 41' N. Longitude 89° 18' E. Elevation 1870 m. Loam soil, middle pasture, 44km south of Jimsar, east sloping steep hillside pasture near Chuan Zi Jie Village, Xinjiang. Diversity immense.

The following were collected by Douglas R. Dewey, USDA-ARS, Forage and Range Research Laboratory, Utah State University, UMC-63, Logan, Utah 84322, United States; Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/30/1993.

PI 639753. Pseudoroegneria geniculata (Trin.) A. Love
Wild. DJ-3918; MB-85-31-40; W6 14057. Collected 08/12/1989 in Russian Federation. Elevation 1180 m. Between 859 & 658km markers, north side of Cheketeman Pass, Gorno Altay A.O., from the summit (660km marker on Hwy M-52 at 1250m elev.) to base (656km marker and 1010m elev.). Plants coarse. Probably tetraploid.

The following were collected by Douglas R. Dewey, USDA-ARS, Forage and Range Research Laboratory, Utah State University, UMC-63, Logan, Utah 84322, United States. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 12/10/1993.

PI 639754. Elymus lanceolatus (Scribn. & J. G. Sm.) Gould
Wild. D-2848; R-13-11-15 1987; W6 14221. Collected in Utah, United States. In sagebrush and juniper 5 miles east of Park Valley, Utah.

PI 639755. Elymus lanceolatus (Scribn. & J. G. Sm.) Gould
Wild. D-3353; MB-87-51-60 1985; W6 14243. Collected 08/09/1983 in Wyoming, United States. At junction of Medicine Bow River and Highway 267, Carbon County, Wyoming.

The following were collected by Douglas R. Dewey, USDA-ARS, Forage and Range Research Laboratory, Utah State University, UMC-63, Logan, Utah 84322, United States; W. Tai, University of Manitoba, Department of Plant Science, Winnipeg, Manitoba, Canada. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 12/10/1993.

PI 639756. Elymus schrenkianus (Fisch. & C. A. Mey.) Tzvelev
Wild. DT-3028; MB-115-1-10 1988; W6 14301. Collected in China.

The following were collected by Douglas R. Dewey, USDA-ARS, Forage and Range Research Laboratory, Utah State University, UMC-63, Logan, Utah 84322, United States; Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 12/10/1993.

PI 639757. Elymus sibiricus L.
Wild. DJ-3832; MB-92-41-50 1991; W6 14358. Collected 08/09/1989 in Russian Federation. Elevation 340 m. Along Sema River at Kamlak Field Station of the Central Siberian Botanical Garden (Gorno Altay A.O.). Spikes slender, drooping. Spikes and leaves green.

PI 639758. Elymus trachycaulus (Link) Gould ex Shinners
Wild. DJ-3837; MB-117-71-80 1991; W6 14359. Collected 08/09/1989 in Russian Federation. Open south facing hillside north of highway M-52 at Kamlak (Gorno Altay A.O.). Lemmas mucronate. Ergot infested.

PI 639759. Elymus trachycaulus (Link) Gould ex Shinners
Wild. DJ-3905; MB-119-31-40 1991; W6 14377. Collected 08/12/1989 in Russian Federation. Elevation 1250 m. North side of top of Cheketeman Pass, Gorno Altay A.O., from summit (660km marker on highway M-52 at 1250m elev.) to its base (656km marker and 1010 elev.). Typical.

PI 639760. Elymus dahuricus Turcz. ex Griseb.
Wild. DJ-3926; MB-89-11-20 1991; W6 14384. Collected 08/12/1989 in Russian Federation. Elevation 1010 m. Near the 656km marker, north side of Cheketeman Pass, Gorno Altay A.O., from the summit (660km marker on highway M-52 at 1250m elev.) to its base (656km marker and 1010m elev.), in a moist meadow.

PI 639761. Elymus gmelinii (Ledeb.) Tzvelev
Wild. DJ-3945; MB-111-61-80 1991; W6 14394. Collected 08/13/1989 in Russian Federation. Elevation 950 m. Ungrazed area. A side canyon to left of highway M-52 at 667km marker between Cheketeman Pass and Aktash, 1 km beyond the Cheketeman camp, Gorno Altay A.O. Bulk area of several plants and some possible hybrids.

PI 639762. Elymus gmelinii (Ledeb.) Tzvelev
Wild. DJ-3970; MB-109-11-20 1991; W6 14397. Collected 08/14/1989 in Russian Federation. Elevation 1100 m. Rocky hillside near the 768km marker on highway M-52 toward Aktash, Gorno Altay A.O. Awns long, divergent.

PI 639763. Elymus dahuricus Turcz. ex Griseb.
Wild. DJ-3976; MB-88-1-10 1991; W6 14399. Collected 08/15/1988 in Russian Federation. Elevation 1250 m. South side of Cheketeman Pass, Gorno Altay A.O. from the summit (660km marker on highway 52 at 1250m elev.) to the Cheketeman camp (666km marker at 960m elev.). Spikes intensely purplish-brown.

PI 639764. Elymus pendulinus (Nevski) Tzvelev
Wild. DJ-4012; MB-112-1-10 1991; W6 14405. Collected 08/16/1989 in Russian Federation. Elevation 950 m. Moist ravine near the 681 km marker on highway M-52 (15km south of Cheketeman camp) toward Aktash and parallel to the Katun River (Gorno Altay A.O.).

PI 639765. Elymus trachycaulus (Link) Gould ex Shinners
Wild. DJ-4053; MB-118-11-20 1991; W6 14413. Collected 08/21/1989 in Russian Federation. Elevation 600 m. Open foothills on mountainside west of the Kamlak Field Station of the Central Siberian Botanical Garden (Gorno Altay A.O.) from 540 meters at the bottom to 840 meters at top.

The following were collected by Walter Graves, University of California Cooperative Ext. Service (retired), 7665 Volclay Drive, San Diego, California 92119-1219, United States; Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Melvin Rumbaugh, R.R. 3, Box 125, Humboldt, Nebraska 68376, United States; Nicolay Portinier, Kamorov Institute of Botany, St. Petersburg, Leningrad, Russian Federation; Jay Hart, 20 Bush Lane, Ithaca, New York 14850, United States; Nicolay Khitrov, Dokvchaev Soil Institute, Pygevsky, per., 7., Moscow, Moscow 109017, Russian Federation. Received 01/1996.

PI 639766. Dactylis glomerata L.
Wild. 0012; VIR 177; US 12; W6 17821. Collected 08/30/1995 in Russian Federation. Latitude 44° 3' 49" N. Longitude 40° 1' 5" E. Elevation 1850 m. Province Maykop, 30 km. southwest of Dakhovskaya. Past logged, now grazed and roadway. Slope 6-10%, aspect S. Light 1/4 shade. Soil loam. Moist to seasonally dry, ridgetop, rock outcrop. Vegetation evergreen and some deciduous forest with closed lower layers. Surrounding vegetation evergreen broad-leafed herb vegetation. Dominant tree species Caucasus Beech, Spruce-Fir, Pinus. Dominant shrub species Juniperus o. Dominant herb/grass species Calamagrostis c., Lolium p., Plantago sp., Trifolium, Cirsium and other Thistle sp., Rumex sp., Cephalaris sp. Population distribution patchy, abundance frequent. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 639767. Dactylis glomerata L.
Wild. 0036; VIR 202; US 36; W6 17831. Collected 09/01/1995 in Russian Federation. Latitude 44° 9' 28" N. Longitude 40° 1' 50" E. Elevation 1250 m. Province Maykop, 15 km. southwest of Dakhovskaya. Past logged, now grazed/hayed. Slope 0-5%, aspect N. Light 1/4 shade. Soil loam, pH neutral. Moist to seasonally dry, lower slope. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Acer sp. Dominant shrub species Laurocerasus o., Rosa sp. Dominant herb/grass species Geranium sanguineum, Clinopodium vulgare, Betonica macrantia, Brachypodium pinnatum, Calamagrostis a., Phleum montanum. Populaton distribution patchy, abundance frequent. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 639768. Dactylis glomerata L.
Wild. 0046; VIR 212; US 46; W6 17834. Collected 09/03/1995 in Russian Federation. Latitude 44° 12' 30" N. Longitude 40° 15' 10" E. Elevation 550 m. Province Maykop, 5 km. southeast of Dakhovskaya. Past logged, now roadway. Slope 0-5%, aspect SE. Light open. Soil clay-loam upper to 25 cm., clay >25 cm., pH 6.8. Seasonally dry, mid slope. Vegetation closed, evergreen tall grass and broad-leafed herb vegetation. Surrounding vegetation evergreen open forest with closed lower layers. Dominant tree species Quercus sp. Dominant shrub species Rosa sp. Dominant herb/grass species Daucus c., Trifolium sp., Achellia sp., Geranium sp., Brachypodium p., Festuca sp., Calamagrostis sp., Agrostis sp., Phleum p. Population distribution patchy, abundance frequent. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 03/06/1997.

PI 639769. Leymus chinensis (Trin.) Tzvelev
Wild. 96S-12; W6 19559. Collected 08/1996 in Mongolia. Latitude 44° 48' 31" N. Longitude 97° 22' 4" E. Elevation 1330 m. Gobi-Altai Aimag, east end of Zakhuin Gobi. 0% slope. Small oasis consisting of a series of wet seep areas surrounded by typical desert soils and vegetation. Lush vegetation occurs near the wet seep areas. DOMINANT VEG: Ecotone between wet areas dominated by Phragmities communis and desert dominated by shrubs such as Reaumuria., Astragalus, Elymus spp., Reaumuria.

PI 639770. Leymus secalinus (Georgi) Tzvelev **subsp. secalinus**
Wild. 96S-84; W6 19611. Collected 09/1996 in Mongolia. Latitude 46° 6' 44" N. Longitude 91° 33' 16" E. Elevation 1213 m. Khovd Aimag, Bulgan Sum, an experimental area about 1 km from the sum center. 0% slope. Outwash plain in desert steppe that has been fenced for 30 years as an experimental crop area. Flood irrigation is used. Soils are coarse, recent river alluvium with coarse sandy brown soils. DOMINANT VEG: Experimental area currently being harvested for hay. Associated species other than species collected were crab apple and sea buckthorn.

PI 639771. Elymus sibiricus L.
Wild. 96S-86; W6 19613. Collected 09/1996 in Mongolia. Latitude 46° 6' 44" N. Longitude 91° 33' 16" E. Elevation 1213 m. Khovd Aimag, Bulgan Sum, an experimental area about 1 km from the sum center. 0% slope. Outwash plain in desert steppe that has been fenced for 30 years as an experimental crop area. Flood irrigation is used. Soils are coarse, recent river alluvium with coarse sandy brown soils. DOMINANT VEG: Experimental area currently being harvested for hay. Associated species other than species collected were crab apple and sea buckthorn.

PI 639772. Alopecurus brachystachyus M. Bieb.
Wild. 96S-95; W6 19617. Collected 09/1996 in Mongolia. Latitude 47° 25' 23" N. Longitude 92° 13' 37" E. Elevation 1400 m. Khovd Aimag, Mankhan Sum, fenced experimental farm that is currently being used as a hay-making area located about 0.5 km from sum center. 0% slope. Old river terrace at edge of the sum center that is irrigated to produce hay. Soils are rubbly, gravelly valley outwash soils. DOMINANT VEG: Salix, Populus, and Phragmities communis.

PI 639773. Alopecurus arundinaceus Poir.
Wild. 96N-257; W6 19747. Collected 08/1996 in Mongolia. Latitude 49° 25' 50" N. Longitude 94° 29' 34" E. Elevation 2172 m. Uvs Aimag, located 26 km south on Beruuturuun and 18 km west of Mondaahoo. Site is a woodland opening with 10% slope and a south aspect with some logging and considerable scattered wood scraps about. DOMINANT VEG: Collected species plus Geranium pratense, Carex pediformis, Thalictrum simplex, Delphinium grandifolium, Dianthus versicolor. ECOLOGICAL ZONE: Forest steppe.

PI 639774. Festuca altaica Trin.
Wild. 96N-262; W6 19750. Collected 08/1996 in Mongolia. Latitude 49° 25' 50" N. Longitude 94° 29' 34" E. Elevation 2172 m. Uvs Aimag, located 26 km south on Beruuturuun and 18 km west of Mondaahoo. Site is a woodland opening with 10% slope and a south aspect with some logging and considerable scattered wood scraps about. DOMINANT VEG: Collected species plus Geranium pratense, Carex pediformis, Thalictrum simplex, Delphinium grandifolium, Dianthus versicolor ECOLOGICAL ZONE: Forest steppe.

PI 639775. Agropyron cristatum (L.) Gaertn.
Wild. 96N-387; W6 19845. Collected 09/1996 in Mongolia. Latitude 47° 54' 36" N. Longitude 106° 6' 25" E. Elevation 1447 m. Tov Aimag, located southwest of Bayantsogt and 9 km south of the Arvayheer to Ulaanbaatar highway. Site is a hillside with north aspect, light brown soils, and 6-10% slope. Site is on the west side of a gravel pit and approximately 0.5 km from the pavement. DOMINANT VEG: Festuca lenensis, Koelari gracilis, Poa attenuata, Artemisia commutata, Stipa capillata, Agropyron cristatum, Allium anisipodium. ECOLOGICAL ZONE: Steppe.

The following were collected by Warren M. Williams, AgResearch, Grasslands Research Centre, Grasslands Research Centre, Fritzherbert West, Private Bags 11008, Palmerston North, North Island, New Zealand; Alan V. Stewart, Pyne Gould Guinness Ltd., P.O. Box 3100, 411 Blenheim Road, Christchurch, South Island 8015, New Zealand. Received 01/1998.

PI 639776. Lolium multiflorum Lam.
Uncertain. C27; W6 20324. Collected 07/1997 in California, United States . Elevation 3 m. Monterey. Stanford University Marine Station, Cannery Row. Neglected frontage. Loam. Slope 0-5%. Open. Seasonally dry. Dune.

PI 639777. Lolium multiflorum Lam.
Uncertain. C147; W6 20365. Collected 08/1997 in California, United States. Elevation 0 m. On north edge of town of Orick in Humboldt County on right just before bridge over Redwood River. Beef pasture, stream terrace, grazed, sand/loam, 0-5% slope, open, moist.

PI 639778. Festuca arundinacea Schreb.
Uncertain. OR47; W6 20409. Collected 08/1997 in Oregon, United States. Latitude 44° 5' 44" N. Longitude 123° 42' 54" W. Elevation 81 m. Near town of Greenleaf, 4 - 5 miles east of Deadwood on Route 36. Town of Greenleaf. Grazed/mown, loam, 0-5% slope, open, seasonally dry, stream terrace.

PI 639779. Festuca arundinacea Schreb.
Uncertain. OR49; W6 20411. Collected 08/1997 in Oregon, United States. Latitude 44° 11' 51" N. Longitude 123° 32' 37" W. Elevation 148 m. Near town of Blachly, east of Triangle Lake. River terrace, loam, 0-5% slope, open, seasonally dry, abandoned pasture, ungrazed mosaic of dominant species (tall fescue, cocksfoot, plantain, Agrostis) in different areas.

PI 639780. Festuca arundinacea Schreb.
Wild. W78; W6 20502. Collected 08/1997 in Washington, United States. Latitude 48° 7' 50" N. Longitude 123° 11' 50" W. Elevation 3 m.

Near town of Dungeness, sand dune area adjacent to wildlife reserve. Sand, 0-5% slope, open, seasonally dry.

The following were collected by Charles West, University of Arkansas, Altheimer Laboratory-Agronomy, 276 Altheimer Drive, Fayetteville, Arkansas 72703, United States; David A. Sleper, University of Missouri, Department of Agronomy, 271-F Life Sciences Center, Columbia, Missouri 65211, United States; Saddik Saidi, Morocco. Received 12/1997.

PI 639781. Festuca arundinacea Schreb.
Wild. 93019; W6 20532. Collected 06/1993 in Morocco. Latitude 32° 24' N. Longitude 4° 10' W. Elevation 1470 m. Tiouzaguine, in the province of Er Rachidia.

The following were collected by Charles West, University of Arkansas, Altheimer Laboratory-Agronomy, 276 Altheimer Drive, Fayetteville, Arkansas 72703, United States; David A. Sleper, University of Missouri, Department of Agronomy, 271-F Life Sciences Center, Columbia, Missouri 65211, United States; Jose Alberto Oliveira, Centro de Investigaciones Agrarias de Mabegondo, Apdo 10, La Coruqa, Spain. Received 12/1997.

PI 639782. Festuca arundinacea Schreb.
Wild. 93067; W6 20552. Collected 07/1993 in Spain. Latitude 41° 47' N. Longitude 3° 1' E. Elevation 10 m. Sant Feliu de Guixols, W side in the province of Gerona.

The following were collected by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 09/1998.

PI 639783. Nassella viridula (Trin.) Barkworth
Wild. T-923; W6 20895. Collected in Alberta, Canada. Latitude 49° 59' N. Longitude 112° 4' W. 21 km north of Taber on Highway 36.

PI 639784. Nassella viridula (Trin.) Barkworth
Wild. T-930; W6 20898. Collected in Alberta, Canada. Latitude 53° 1' N. Longitude 111° 40' W. 5 miles south, 3.5 miles east of Viking.

PI 639785. Nassella viridula (Trin.) Barkworth
Wild. T-935; W6 20900. Collected in Colorado, United States. Latitude 39° 4' N. Longitude 107° 22' W. 7 miles south of McClure Pass on Highway 133 in Gunnison County.

PI 639786. Nassella viridula (Trin.) Barkworth
Wild. Acc:1145; 9001145; W6 20903. Collected in Montana, United States. Choteau County.

PI 639787. Elymus elymoides subsp. brevifolius (J. G. Sm.) Barkworth
Wild. T-1180; W6 20998. Collected in New Mexico, United States. Latitude 36° 3' N. Longitude 104° 48' W. I-25 5.6 miles northwest of Wagon Mound at Highway 120 in Mora County.

PI 639788. Elymus elymoides subsp. brevifolius (J. G. Sm.) Barkworth
Wild. T-1202; W6 20999. Collected in Idaho, United States. Latitude

43° 18' N. Longitude 114° 18' W. Highway 75 26.5 miles north of Shoshone city center in Blaine Count.

PI 639789. Elymus elymoides subsp. brevifolius (J. G. Sm.) Barkworth
Wild. T-1203; W6 21000. Collected in Idaho, United States. Latitude 43° 21' N. Longitude 114° 41' W. Highway 20 5 miles east of Fairfield in Camas County.

PI 639790. Elymus elymoides subsp. brevifolius (J. G. Sm.) Barkworth
Wild. T-1206; W6 21003. Collected in Idaho, United States. Latitude 43° 19' N. Longitude 115° 20' W. Highway 20 at Castle Rock Road in the Boise National Forest in Elmore County.

The following were collected by Dennis P. Sheehy, 69086 Allen Canyon Road, Wallowa, Oregon 97885, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Mark E. Majerus, USDA-NRCS, Plant Materials Center, Rt. 2, Box 1189, Bridger, Montana 59014-9718, United States; Susan R. Winslow, USDA-NRCS, Bridger PMC, Route 2, Box 1189, Bridger, Montana 59014-9718, United States. Received 05/05/1999.

PI 639791. Elymus sibiricus L.
Wild. 98HT-6; W6 21140. Collected 09/1998 in Mongolia. Latitude 48° 6' 29" N. Longitude 108° 43' 27" E. Elevation 1524 m. Mongolmort Sum, Tov Aimag. North side of minor drainage into the Herlen River, near a winter camp in a typical hay-making area. Soils are dark chernozem with rock fragments present. Associated vegetation:Forest steppe vegetation dominated by Leymus chinensis with the shrub Dasiphora. Many forbs including legumes.

PI 639792. Agropyron cristatum (L.) Gaertn.
Wild. 98HT-21; W6 21152. Collected 09/1998 in Mongolia. Latitude 48° 1' 18" N. Longitude 108° 36' 8" E. Elevation 1463 m. Bohaiam, Mongolmort Sum, Tov Aimag. On the east side of the broad Herlen River Valley several kilometers from the river. Flat slope at base of hills with granite outcrops located on hills above the site 0.5 km). Soils are typically eroded granite with many fine rock particles. Associated vegetation:Grass steppe dominated by Agropyron cristatum, Stipa sibirica, Festuca lenensis, and Medicago ruthenica.

PI 639793. Elymus dahuricus Turcz. ex Griseb.
Wild. 98HT-72; W6 21188. Collected 09/1998 in Mongolia. Latitude 48° 11' 50" N. Longitude 109° 40' 18" E. Elevation 1341 m. Omnodelger Sum, Henti Aimag. East bank along a small stream. Soils are dark and high in organic matter with gravel and rocks present. Associated vegetation:Grasses and shrubs dominate with Larix occuring at higher elevations and Salix occuring in riparian zone.

PI 639794. Elymus pendulinus subsp. brachypodioides (Nevski) Tzvelev
Wild. 98HT-150; W6 21247. Collected 09/1998 in Mongolia. Latitude 48° 49' 40" N. Longitude 110° 8' 5" E. Elevation 1219 m. Batchirrit Sum, Henti Aimag. West side of the Onon Gol Valley on the edge of a river-formed terrace. Old channels have tree and brush cover, and open areas are used as hayfields. Soil is rocky and gravelly. Associated vegetation:Sloughs contain marsh genera; old river channels are dominated by alder, Populus, and Larix.

PI 639795. Elymus sibiricus L.
Wild. 98HT-182; W6 21271. Collected 09/1998 in Mongolia. Latitude 48° 39' 50" N. Longitude 110° 13' 22" E. Elevation 1280 m. Batchirrit Sum, Henti Aimag. Saddle pass where the road crosses from one sub-watershed of small tributary of the Onon River. Larix forest covers both sides of the pass except for a small area of forest opening on an east aspect. Soils mainly rock fragments and gravel. Associated vegetation:forest steppe. Trees are scattered with well-developed herbaceous understory of Elymus, Agropyron, Stipa, Potentilla, and Astragalus.

PI 639796. Elymus dahuricus Turcz. ex Griseb.
Wild. 98HT-259; W6 21333. Collected 09/1998 in Mongolia. Latitude 48° 57' 9" N. Longitude 111° 3' 40" E. Elevation 1036 m. Daduul Sum, Henti Aimag. Slope above valley floor. The entire area appears to have burned the previous year. Associated vegetation:Dominated by forbs released by the burn. Stipa and Bromus found on mounds. Astragalus and Melilotus are present but seeds have already been dispersed.

PI 639797. Elymus sibiricus L.
Wild. 98HT-318; W6 21383. Collected 09/1998 in Mongolia. Latitude 47° 59' 12" N. Longitude 108° 53' 27" E. Elevation 1707 m. Sinkermandel Sum, Henti Aimag. South of road in small valley with surrounding area of mixed forest and grass steppe. Associated vegetation:Mixed forest-grass steppe.

PI 639798. Elymus dahuricus Turcz. ex Griseb.
Wild. 98HV-18; W6 21400. Collected 09/1998 in Mongolia. Latitude 49° 45' 2" N. Longitude 106° 25' 7" E. Elevation 792 m. Bayankharaat Sum, Selenge Aimag, near 4th Brigade Hdqt. Sandy, Chestnut, Light Brown soil, abandoned crop land. Associated vegetation:Elymus dahuricus, Setaria viridis, Lespedeza daurica, Poa botryoides, Ixeridium gramineum.

PI 639799. Elymus dahuricus Turcz. ex Griseb.
Wild. 98HV-30; W6 21411. Collected 09/1998 in Mongolia. Latitude 49° 45' 58" N. Longitude 106° 57' 47" E. Elevation 762 m. Yoroo Sum; Selenge Aimag; 2nd Brigade Khanagait. Chernozem, dark brown soil. Associated vegetation:Elymus dahuricus, Geum aleppicum, Elymus gmelinii, Artemisia vulgaris, Geranium sibiricum.

PI 639800. Phleum phleoides (L.) H. Karst.
Wild. 98HV-37; W6 21418. Collected 09/1998 in Mongolia. Latitude 49° 46' 20" N. Longitude 107° 8' 59" E. Elevation 914 m. Huder Sum, Selenge Aimag, 30 km west of Huder. Forest site, Brown soil, Forb-grass mountain steppe. Associated vegetation:Stipa krylovii, Phleum phleoides, Bromus inermis, Potentilla viscosa, Artemisia commutata, Agrostis sp., Elymus gmelinii, Pinus sylvestris, Betula platyphylla.

PI 639801. Elymus sibiricus L.
Wild. 98HV-39; W6 21420. Collected 09/1998 in Mongolia. Latitude 49° 46' 33" N. Longitude 107° 16' 17" E. Elevation 914 m. Huder Sum, Selenge Aimag, 20 km west of Huder. brown meadow soil. Associated vegetation:Grass-Forb meadow, Elymus gmelinii, Phleum phleoides, Potentilla sp., Sanguisorba officinalis, Geranium pratense, Vicia amoena, Artemisia vulgaris, Thalictrum minus, Agrimonia pilosa.

PI 639802. Phleum phleoides (L.) H. Karst.
Wild. 98HV-45; W6 21426. Collected 09/1998 in Mongolia. Latitude 49° 47' 4" N. Longitude 107° 34' 10" E. Elevation 853 m. Huder Sum, Selenge Aimag, 5 km east of Huder. Grass-forb mountain meadow-adjacent to birch stands, dark soils. Associated vegetation: Stipa sibirica, Stipa bicaulensis, Elymus gmelinii, Vicia amoena, V. unijuga, Artemisia sericea, Galatella dahurica, Hieracium umbellatum, Sanguisorba officinalis.

PI 639803. Phleum phleoides (L.) H. Karst.
Wild. 98HV-48; W6 21429. Collected 09/1998 in Mongolia. Latitude 49° 52' 30" N. Longitude 107° 43' 21" E. Elevation 762 m. Huder Sum, Selenge Aimag, 30 km east of Huder. meadow, dark brown soil, Uyalga River, wide open valley bordered by birch hills. Associated vegetation: Elytrigia gmelinii, Poa pratensis, Artemisia lucentica, Potentilla tanacetifolia, Leymus chinensis, Thalictrum simplex, T. minus.

PI 639804. Elymus pendulinus subsp. brachypodioides (Nevski) Tzvelev
Wild. 98HV-56; W6 21437. Collected 09/1998 in Mongolia. Latitude 49° 52' 30" N. Longitude 107° 43' 21" E. Elevation 762 m. Huder Sum, Selenge Aimag, 30 km east of Huder. meadow, dark brown soil, Uyalga River, wide open valley bordered by birch hills. Associated vegetation: Elytrigia gmelinii, Poa pratensis, Artemisia lucentica, Potentilla tanacetifolia, Leymus chinensis, Thalictrum simplex, T. minus.

PI 639805. Pseudoroegneria strigosa subsp. aegilopoides (Drobow) A. Love
Wild. 98HV-58; W6 21439. Collected 09/1998 in Mongolia. Latitude 49° 45' 42" N. Longitude 107° 41' 10" E. Elevation 762 m. Huder Sum, Selenge Aimag, 10 km E of Huder. Meadow Chernozem, subirrigated valley bordered by birch to north and birch/P. sylvestris to south. Associated vegetation: Calamagrostis sp., Elytrigia aegilopoides, Trisetum sibiricum, Veronica verticillata, Filipendula ulmaria.

PI 639806. Poa pratensis L.
Wild. 98HV-64; W6 21445. Collected 09/1998 in Mongolia. Latitude 49° 54' 32" N. Longitude 107° 24' 23" E. Elevation 762 m. Huder Sum, Selenge Aimag, 15 km west of Huder. Forb-Stipa site, dark brown meadow soil, base of south facing slope. Associated vegetation: Stipa baicalensis, Phlomis tuberosa, Medicago falcata, Artemisia dracunculis, Heteropappas biennis.

PI 639807. Elymus sibiricus L.
Wild. 98HV-67; W6 21448. Collected 09/1998 in Mongolia. Latitude 49° 57' 38" N. Longitude 107° 19' 31" E. Elevation 914 m. Huder Sum, Selenge Aimag, 45 km SW of Huder. Abandoned wheat field on bench in the mountains, Mountain dark brown soil. Associated vegetation: Artemisia vulgaris, Leymus chinensis, Hieracium umbullatum, Bromus inermis, Trifolium lupinaster.

PI 639808. Poa pratensis L.
Wild. 98HV-68; W6 21449. Collected 09/1998 in Mongolia. Latitude 49° 57' 38" N. Longitude 107° 19' 31" E. Elevation 914 m. Huder Sum, Selenge Aimag, 45 km SW of Huder. Abandoned wheat field on bench in the mountains, Mountain dark brown soil. Associated vegetation: Artemisia

vulgaris, Leymus chinensis, Hieracium umbullatum, Bromus inermis, Trifolium lupinaster.

PI 639809. Stipa sibirica (L.) Lam.
Wild. 98HV-98; W6 21478. Collected 09/1998 in Mongolia. Latitude 50° 17' 59" N. Longitude 104° 58' 51" E. Elevation 732 m. Tushig Sum, Selenge Aimag, 10 km west of Tushig along Dzelter River. Meadow brown soil, alluvium river bottom adjacent to Dzelter River, grass-forb type. Associated vegetation: Delphinium grandiflora, Elymus excelsus, Elymus gmelinii, Trisetum sibiricum, Artemisia laciniata, Geranium pratense, Achillea asiatica, Vicia amoena.

PI 639810. Elymus dahuricus subsp. excelsus (Turcz. ex Griseb.) Tzvelev
Wild. 98HV-100; W6 21480. Collected 09/1998 in Mongolia. Latitude 50° 17' 59" N. Longitude 104° 58' 51" E. Elevation 732 m. Tushig Sum, Selenge Aimag, 10 km west of Tushig along Dzelter River. Meadow brown soil, alluvium river bottom adjacent to Dzelter River, grass-forb type. Associated vegetation: Delphinium grandiflora, Elymus excelsus, Elymus gmelinii, Trisetum sibiricum, Artemisia laciniata, Geranium pratense, Achillea asiatica, Vicia amoena.

PI 639811. Agropyron cristatum (L.) Gaertn.
Wild. 98HV-116; W6 21495. Collected 09/1998 in Mongolia. Latitude 49° 36' 25" N. Longitude 104° 26' 40" E. Elevation 762 m. Ingettolgoi Sum, Bulgan Aimag, 20 km NE of Khyalganat. Selenge River Valley, forb-grass type, broad bench above river valley, native area adjacent to wheat fields, dry meadow, sandy, light color, brown soil. Associated vegetation: Stipa sibirica, Stipa grandis, Agropyron cristatum, Potentilla viscosa, Hedysarum dahuricum, Artemisia vulgaris, Ulmus pumila, Scabiosia comosa, Bupleurum scorzonerifolium, Thalictrum petaloidium.

PI 639812. Agropyron cristatum (L.) Gaertn.
Wild. 98HV-142; W6 21517. Collected 09/1998 in Mongolia. Latitude 49° 47' 46" N. Longitude 101° 48' 27" E. Elevation 1524 m. Tarailan Sum, Hovsgol Aimag, 34 km NW of Tarailan. Long gradual slope. Associated vegetation: Stipa baicalensis, Festuca lenensis, Filifolium sibiricum, Potentilla tanacetifolia, Scabiosa comosa, Stelleria chamojasme.

PI 639813. Elymus sibiricus L.
Wild. 98HV-154; W6 21529. Collected 09/1998 in Mongolia. Latitude 50° 8' 14" N. Longitude 101° 34' 36" E. Elevation 1204 m. Eguur Sum, Hovsgol Aimag, 3 km NW of Erdenebulgan. sandy light brown soil, extensive mountain valley bottomland, upper edges in grain. Associated vegetation: Leymus chinensis, Elymus nutans, Artemisia macrocephalus, A. vulgaris, A. scoparia, Trifolium lupinaster, Potentilla anserina.

PI 639814. Agropyron cristatum (L.) Gaertn.
Wild. 98HV-162; W6 21537. Collected 09/1998 in Mongolia. Latitude 50° 6' 39" N. Longitude 101° 16' 40" E. Elevation 1372 m. Eguur Sum, Hovsgol Aimag, 30 km west of Erdenebulgan. Sloping mountain meadow just above cut-bank along small streams, alluvial fan, forb-Stipa type, light brown soil. Associated vegetation: Sanguisorba officinalis, Medicago platycarpos, Stipa baicalensis, Echinops latifolia, Thalictrum minus, Geranium pratense, Leymus chinensis, Poa botryoides.

PI 639815. Agropyron cristatum (L.) Gaertn.
Wild. 98HV-198; W6 21573. Collected 09/1998 in Mongolia. Latitude 50° 17' 45" N. Longitude 100° 5' 6" E. Elevation 1676 m. Hovsgol Sum, Hovsgol Aimag, 19 km south of Hatgal. Broad river valley, alluvial gravels, Stipa krylovii-Artemisia frigida type, light sandy brown soil. Associated vegetation: Poa botryoides, Stipa krylovii, Artemisia frigida, Koeleria macrantha, Aster alpinus, Leontopodium ochroleucurn, Kobresia sibirica.

PI 639816. Agropyron cristatum (L.) Gaertn.
Wild. 98HV-244; W6 21615. Collected 09/1998 in Mongolia. Latitude 49° 58' 7" N. Longitude 99° 39' 51" E. Elevation 1829 m. Arbulag Sum, Hovsgol Aimag, 22 km SE of Sumberg 4th Brigade. Narrow draw with steep side slopes, scattered larch and birch in rock outcrops, stoney mountain soil. Associated vegetation: Agropyron cristatum, Koeleria macrantha, Stipa krylovii, Festuca lenensis, Oxytropis nitens, Allium leucocephalum, Pedicularis sp., Oxytropis tragacanthoides.

The following were collected by Harold E. Bockelman, USDA, ARS, National Small Grains Collection, 1691 S 2700 W, Aberdeen, Idaho 83210, United States; Richard C. Johnson, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Roman Boguslavsky, National Centre for Plant Genetic Resources of Ukraine, Lab. for Introduction & Storage of Plant Genetic Resources, Yurjev Institute of Plant Production, Kharkiv, Kharkiv 61060, Ukraine; Vladislav Korzhenevsky, State Nikitsky Botanical Gardens, Department of Flora & Vegetation, Yalta, Krym 334267, Ukraine. Received 08/15/1999.

PI 639817. Brachypodium sylvaticum (Huds.) P. Beauv.
Wild. UKR-99-024; W6 21715. Collected 07/28/1999 in Krym, Ukraine. Latitude 44° 24' 39" N. Longitude 34° 0' 15" E. Elevation 195 m. Near Simeiz along road A-294. South slope, rocky, dry, highly diverse calcarous.

PI 639818. Brachypodium distachyon (L.) P. Beauv.
Wild. UKR-99-081; W6 21754. Collected 07/30/1999 in Krym, Ukraine. Latitude 44° 30' 55" N. Longitude 33° 33' 23" E. Elevation 260 m. On road to Sevastopol. South slope, rocky, very dry.

PI 639819. Melica ciliata L.
Wild. UKR-99-126; W6 21786. Collected 07/31/1999 in Krym, Ukraine. Latitude 44° 30' 41" N. Longitude 33° 50' 48" E. Elevation 420 m. In lake valley near Peredove. South slope, grazed, rocky.

PI 639820. Dactylis glomerata L.
Wild. UKR-99-133; W6 21790. Collected 07/31/1999 in Krym, Ukraine. Latitude 44° 28' 42" N. Longitude 33° 45' 32" E. Elevation 280 m. Near Pavliyka. Flat.

PI 639821. Brachypodium rupestre (Host) Roem. & Schult.
Wild. UKR-99-006; W6 21795. Collected 07/31/1999 in Krym, Ukraine. Latitude 44° 30' 39" N. Longitude 34° 14' E. Elevation 300 m. Near and around Nikita Botanical. South slope, rocky.

The following were donated by Khorshid Razmjoo, Taisei Biotechnology Research, 3-6 Akanehama, Narashino-shi, Chiba, Chiba 275, Japan. Received 08/28/1997.

PI 639822. Lolium perenne L.
Cultivated. PR2; W6 22036. Selected for cold tolerance. Cold tolerance method was: Plants in pots were put in growth chamber. Temperature decrease 1 degree a day until -15C. Planted in field for two years and 4-8 clones were selected for disease resistance, color, leaf size and density under Japanese conditions.

PI 639823. Festuca arundinacea Schreb.
Cultivated. TF3; W6 22041. Selected for flood tolerance. Flood tolerance method was: Potted plants grown under natural conditions and filled/flooded with water from winter until summer. Planted in field for two years and 4-8 clones were selected for disease resistance, color, leaf size and density under Japanese conditions.

PI 639824. Festuca arundinacea Schreb.
Cultivated. TF4; W6 22042. A semi-dwarf type selected for heat tolerance. Heat tolerance method was: Plants in pots were put in growth chamber. Temperature increase 1 degree a day until 50C. Planted in field for two years and 4-8 clones were selected for disease resistance, co lor, leaf size and density under Japanese conditions.

PI 639825. Festuca arundinacea Schreb.
Cultivated. TF7; W6 22045. Dwarf type selected for heat tolerance. Heat tolerance method was: Plants in pots were put in growth chamber. Temperature increase 1 degree a day until 50C. Planted in field for two years and 4-8 clones were selected for disease resistance, color, leaf size and density under Japanese conditions.

PI 639826. Festuca arundinacea Schreb.
Cultivated. TF8; W6 22046. Selected for heat tolerance. Heat tolerance method was: Plants in pots were put in growth chamber. Temperature increase 1 degree a day until 50C. Planted in field for two years and 4-8 clones were selected for disease resistance, color, leaf size and density under Japanese conditions.

The following were collected by Bjoern Salomon, Swedish University od Agricultural Sciences, Department of Crop Science, P.O. Box 44, Alnarp, Malmohus S-23053, Sweden; C. Baden. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 639827. Leymus tianschanicus (Drobow) Tzvelev
Wild. H7704; W6 22073. Collected 08/26/1987 in Xinjiang, China. Elevation 470 m. Urumqi-S Wujiaqi, along the road. Ploidy: 10x.

The following were collected by R. von Bothmer; Bjoern Salomon, Swedish University od Agricultural Sciences, Department of Crop Science, P.O. Box 44, Alnarp, Malmohus S-23053, Sweden. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 639828. Elymus tibeticus (Melderis) G. Singh
Wild. H8124; W6 22088. Collected 09/09/1988 in Xizang, China. Elevation 3500 m. 55 km from Lhasa towards Gonggar, km stone 51. Ploidy: 4x.

The following were donated by Alan V. Stewart, Pyne Gould Guinness Ltd., P.O. Box 3100, 411 Blenheim Road, Christchurch, South Island 8015, New Zealand. Received 06/12/2000.

PI 639829. Agrostis lyallii Hook. f.
Wild. W6 22514. Collected 2000 in New Zealand. Collected near Ohau.

PI 639830. Poa colensoi Hook. f.
Wild. W6 22524. Collected 2000 in New Zealand. Collected near Lake Hawea.

The following were collected by James A. Young, USDA, ARS, Reno, Nevada, United States. Donated by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/09/2000.

PI 639831. Achnatherum hymenoides (Roem. & Schult.) Barkworth
Wild. Acc: 100; W6 22879.Latitude 48° 14' 2" N. Longitude 119° 18' 6" W. Carson Sink, NV.

The following were collected by Kay H. Asay, USDA, ARS, Forage & Range Research Unit, Utah State University, Logan, Utah 84322-6300, United States. Donated by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/09/2000.

PI 639832. Achnatherum hymenoides (Roem. & Schult.) Barkworth
Wild. Acc: 106; W6 22880. Collected in Utah, United States. 30 miles E of Price, UT.

The following were donated by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/09/2000.

PI 639833. Achnatherum hymenoides (Roem. & Schult.) Barkworth
Wild. Acc: 490; W6 22895.no passport data.

The following were collected by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/09/2000.

PI 639834. Achnatherum hymenoides (Roem. & Schult.) Barkworth
Wild. T-465; W6 22918. Collected 2000 in Colorado, United States. Between mile marker 208 & 209 at the north edge of Buena Vista, CO. associated plant spp. pinyon, Stipa, Yucca.

PI 639835. Achnatherum hymenoides (Roem. & Schult.) Barkworth
Wild. T-569; W6 22935. Collected 2000 in Washington, United States. Hwy 14, mile marker 119, Roosevelt, WA.

PI 639836. Leymus cinereus (Scribn. & Merr.) A. Love
Wild. T-1049; W6 23072. Collected 2000 in Washington, United States. Latitude 48° 14' 2" N. Longitude 119° 18' 6" W. 12.4 m W Disoutel Pass (Hwy 155), WA on road to Omack Lake, just south of lake (Cartar Valley). associated plant spp. big sagebrush.

PI 639837. Leymus cinereus (Scribn. & Merr.) A. Love
Wild. T-1054; W6 23075. Collected 2000 in British Columbia, Canada. Latitude 50° 42' 22" N. Longitude 120° 26' 36" W. 1m S Isabel Lake Education Center access Batchelor Drive, N Kamloops, BC. associated plant spp. rough fescue, sandberg bluegrass, sweet clover, Agrostis, slender wheatgrass.

PI 639838. Leymus cinereus (Scribn. & Merr.) A. Love
Wild. T-1055; W6 23076. Collected 2000 in British Columbia, Canada. Latitude 50° 39' 38" N. Longitude 120° 6' 54" W. East of Kamloops, BC Hwy 1, south shore of S Thompson River. associated plant spp. Kochia, Thinopyrum.

PI 639839. Leymus cinereus (Scribn. & Merr.) A. Love
Wild. T-1076; W6 23087. Collected 2000 in Washington, United States. Latitude 48° 33' 25" N. Longitude 119° 25' 14" W. 7.5 miles NE Riverside, WA, Tunk Valley road to Crawfish Lake (Okanagan County). associated plant spp. big sagebrush, rabbitbrush, cheatgrass.

PI 639840. Leymus cinereus (Scribn. & Merr.) A. Love
Wild. T-1078; W6 23088. Collected 2000 in Washington, United States. Latitude 48° 35' 48" N. Longitude 119° 35' 17" W. 3 miles NW junction of Hwy 97/ C.R 9410 on 9410, 5 miles E Fish Lake (Okanagan County). associated plant spp. quackgrass, Rosa, knapweed, Equisetum.

PI 639841. Leymus cinereus (Scribn. & Merr.) A. Love
Wild. T-1079; W6 23089. Collected 2000 in Washington, United States. Latitude 48° 38' 13" N. Longitude 119° 38' 28" W. Crossing of Stalder and N. Pine Creek Roads, 13 miles SW Tonasket/14 mi NW Riverside, WA. associated plant spp. quackgrass, Rosa.

PI 639842. Leymus cinereus (Scribn. & Merr.) A. Love
Wild. T-1089; W6 23096. Collected 2000 in Washington, United States. Latitude 47° 28' 31" N. Longitude 120° 21' 54" W. On Hwy 2, mile marker 118-117, 2.2 miles E Monitor, WA. associated plant spp. sumac, cheatgrass, sweet clover, mustard.

PI 639843. Leymus cinereus (Scribn. & Merr.) A. Love
Wild. T-1093; W6 23097. Collected 2000 in Washington, United States. Latitude 47° 7' 15" N. Longitude 118° 23' 4" W. Ritzville, WA waste field, first ave. leading into town NE of I-90,. associated plant spp. tarweed, mustard.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Stephanie Greene, USDA, ARS, National Temperate Forage Legume, Germplasm Resources Unit, Prosser, Washington 99350-9687, United States; Nikolai I. Dzyubenko, N.I. Vavilov All-Russian Scientific Research, Institute of Plant Genetic Resources, 44 Bolshaya Morskaya Street,

St. Petersburg, Leningrad 190000, Russian Federation; Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Auskhan Khusainov, Aral Sea Experimant Station for Plant Genetic Resources, 27 Biyekenov Street, Chelkar Town, Kazakhstan. Received 08/2000.

PI 639844. Agropyron desertorum (Fisch. ex Link) Schult.
Wild. KAZ-008; W6 23294. Collected 08/2000 in Kazakhstan. Latitude 49° 46' 10" N. Longitude 57° 19' 34" E. Elevation 272 m.

PI 639845. Agropyron fragile (Roth) P. Candargy
Wild. KAZ-025; W6 23299. Collected 08/2000 in Kazakhstan. Latitude 49° 13' 3" N. Longitude 57° 39' 7" E. Elevation 248 m.

PI 639846. Agropyron cristatum (L.) Gaertn.
Wild. KAZ-091; W6 23306. Collected 08/2000 in Kazakhstan. Latitude 49° 9' 55" N. Longitude 58° 41' 8" E. Elevation 403 m.

PI 639847. Agropyron desertorum (Fisch. ex Link) Schult.
Wild. KAZ-096; W6 23307. Collected 08/2000 in Kazakhstan. Latitude 49° 9' 55" N. Longitude 58° 41' 8" E. Elevation 403 m.

PI 639848. Agropyron desertorum (Fisch. ex Link) Schult.
Wild. KAZ-134; W6 23313. Collected 08/2000 in Kazakhstan. Latitude 49° 16' 35" N. Longitude 58° 33' 22" E. Elevation 368 m.

PI 639849. Agropyron cristatum (L.) Gaertn.
Wild. KAZ-296; W6 23326. Collected 08/2000 in Kazakhstan. Latitude 48° 43' 23" N. Longitude 57° 5' 55" E. Elevation 193 m.

PI 639850. Agropyron cristatum (L.) Gaertn.
Wild. KAZ-304; W6 23327. Collected 08/2000 in Kazakhstan. Latitude 48° 56' 31" N. Longitude 57° 6' 45" E. Elevation 256 m.

The following were collected by Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Alicia Massa, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States; Raul Lira, INIA Kampenaike, Angamos 1056, Casilla 277, Punta Arenas, Magallanes, Chile; Mercedes Masco, INTA, E.E.A. Santa Cruz, CC 332, Rio Gallegos, Santa Cruz 9400, Argentina; Gabriel Oliva, INTA, E.E.A. Santa Cruz, CC 332, Rio Gallegos, Santa Cruz 9400, Argentina; Ivette Sequel, CRI Carillanca, General Lopez, IX Region, Temuco, La Araucania, Chile. Donated by Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 03/19/2001.

PI 639851. Poa pratensis L.
Wild. PRO 96-87; W6 23460. Collected 02/28/1996 in Argentina. Latitude 54° 33' 1" S. Longitude 67° 12' 33" W. Tierra del Fuego, Kaiken, 3 km southwest from Tolhuin, on road to Ushuaia. Slope:10% W. In wet sites plant reaches 60-70 cm in height.

The following were collected by Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Larry K. Holzworth, USDA-NRCS State Office, Federal Bldg.,

Room 443, 10 E. Babcock, Bozeman, Montana 59715-4704, United States; Gu Anlin, Chinese Academy of Agricultural Sciences, Grassland Research Institute, Range Ecology & Management, Huhhot, Nei Monggol 010010, China; Yi Jin, Inner Mongolia Agriculture University, Research Institute of Herbage physiology & Biology, Department of Agricultural Science Inner Mongolia, Huhhot, Nei Monggol 010018, China; Daniel J Miller, 5235 Western Avenue NW, Washington, District of Columbia 20015, United States. Received 06/18/2001.

PI 639852. Elymus nutans Griseb.
Wild. TP00-04-012; W6 23487. Collected 08/21/2000 in Xizang, China. Latitude 35° 6' 38" N. Longitude 102° 25' 53" E. Elevation 2960 m. 15 km SW of Xiahe, Gansu Province. Sangke Grassland, sub-alpine meadow mainly used for winter grazing, some farmed 2000 years ago during Han Dynasty SOIL:Silt loam SLOPE:0-5% ASPECT:NE, SW.

PI 639853. Elymus dahuricus Turcz. ex Griseb.
Wild. TP00-06-016; W6 23491. Collected 08/22/2000 in Xizang, China. Latitude 34° 54' 49" N. Longitude 102° 51' 47" E. Elevation 2900 m. 10 km S of he Zue City, Gansu Province. Mixed grass, shrub, forb, sub-alpine meadow shrub SOIL:Silt loam SLOPE:40% ASPECT:E.

PI 639854. Elymus pseudonutans A. Love
Wild. TP00-08-032; W6 23504. Collected 08/23/2000 in Xizang, China. Latitude 34° 39' 22" N. Longitude 102° 28' 23" E. Elevation 3060 m. 9 km N of Luqu, Gansu Province. Eastside of highway, sub-alpine meadow shrub (valley), winter pasture, narrow valley SOIL:Silt loam SLOPE:3% ASPECT:NW.

PI 639855. Elymus nutans Griseb.
Wild. TP00-08-033; W6 23505. Collected 08/23/2000 in Xizang, China. Latitude 34° 39' 22" N. Longitude 102° 28' 23" E. Elevation 3060 m. 9 km N of Luqu, Gansu Province. Eastside of highway, sub-alpine meadow shrub (valley), winter pasture, narrow valley SOIL:Silt loam SLOPE:3% ASPECT:NW.

PI 639856. Kengyilia melanthera (Keng) J. L. Yang et al.
Wild. TP00-12-048; W6 23519. Collected 08/25/2000 in Xizang, China. Latitude 33° 57' 27" N. Longitude 102° 3' 48" E. Elevation 3280 m. 4 km S of Maqu, Gansu Province. Sand dune area south of Yellow River, sand dunes stabilized SOIL:Sandy loam SLOPE:0-5% ASPECT:Various.

PI 639857. Elymus pseudonutans A. Love
Wild. TP00-20-065; W6 23535. Collected 08/28/2000 in Xizang, China. Latitude 33° 4' 8" N. Longitude 102° 43' 16" E. Elevation 3460 m. 10 km SE of Wagen, Sichuan Province. Upslope from road, sub-alpine shrub meadow, south hillside SOIL:Gravelly silt loam SLOPE:45-60% ASPECT:S.

PI 639858. Elymus nutans Griseb.
Wild. TP00-20-066; W6 23536. Collected 08/28/2000 in Xizang, China. Latitude 33° 4' 8" N. Longitude 102° 43' 16" E. Elevation 3460 m. 10 km SE of Wagen, Sichuan Province. Upslope from road, sub-alpine shrub meadow, south hillside SOIL:Gravelly silt loam SLOPE:45-60% ASPECT:S.

PI 639859. Elymus sibiricus L.
Wild. TP00-21-074; W6 23543. Collected 08/28/2000 in Xizang, China. Latitude 33° 6' 1" N. Longitude 102° 36' 8" E. Elevation 3320 m.

5 km SW of Wagen, Sichuan Province. Sub-alpine meadow (700 mm ppt), abandoned cropland with natural revegetation within 8 years SOIL:Loam SLOPE:0-3% ASPECT:SE.

PI 639860. Elymus dahuricus subsp. excelsus (Turcz. ex Griseb.) Tzvelev
Wild. TP00-26-089; W6 23558. Collected 08/30/2000 in Xizang, China. Latitude 32° 4' 43" N. Longitude 102° 34' 22" E. Elevation 3280 m. 45 km SE of Longriba, Sichuan Province. Sub-alpine shrub, old logged forest SOIL:Gravelly loam SLOPE:30-40% ASPECT:SW.

PI 639861. Deschampsia cespitosa (L.) P. Beauv.
Wild. TP00-38-134; W6 23595. Collected 09/03/2000 in Xizang, China. Latitude 31° 36' 11" N. Longitude 100° 9' 13" E. Elevation 3620 m. 12 km E of Ganzi, Sichuan Province. Sub-alpine meadow, grass and shrub, ungrazed SOIL:Gravelly loam SLOPE:30-35% ASPECT:NW.

PI 639862. Elymus nutans Griseb.
Wild. TP00-48-175; W6 23634. Collected 09/09/2000 in Xizang, China. Latitude 29° 59' 35" N. Longitude 101° 53' 1" E. Elevation 3110 m. 10 km SE of Kangding, Sichuan Province. Field waste margin next to road, horse bean field SOIL:Gravelly loam SLOPE:30% ASPECT:SE.

PI 639863. Elymus varius (Keng) Tzvelev
Wild. TP00-50-181; W6 23640. Collected 09/09/2000 in Xizang, China. Latitude 29° 59' N. Longitude 101° 57' 25" E. Elevation 2700 m. 3 km S of Kangding, Sichuan Province. Near Kangdang Agricultural School in field borders SOIL:Gravelly loam SLOPE:0-3% ASPECT:SW.

The following were collected by Andrew A. Hopkins, Samuel Roberts Noble Foundation, Inc., P.O. Box 2180, 2510 Sam Noble Parkway, Ardmore, Oklahoma 73402, United States. Received 03/15/2002.

PI 639864. Pascopyrum smithii (Rydb.) Barkworth & D. R. Dewey
Wild. NMCS-4; 98WW5; W6 24202. Collected 07/14/1998 in New Mexico, United States. Latitude 36° 46' 20" N. Longitude 10° 50' 28" W. Union County; North of Des Moines, New Mexico. Roadway, slope 0-5%, aspect SE. Open, loam, seasonally dry, lower slope. pH 8.0. Collection area 1000 sq. meters. Population distribution patchy, abundance occasional, source wild, in situ.

PI 639865. Elymus canadensis L.
Wild. OKCS-64; 98CWR9; W6 24249. Collected 07/22/1998 in Oklahoma, United States. Latitude 34° 9' 31" N. Longitude 97° 48' 51" W. Jefferson County; West of Claypool, Oklahoma firehouse. Grazed, slope 0-5% and 6-10%, aspect SE/S/SW. Open, loam/clay, always dry, ridgetop. pH 6.4. Collection area 100,000 sq. meters. Population is patchy and abundant; source is wild, in situ.

PI 639866. Poa pratensis L.
Wild. OKCS-100; 95KB1; W6 24250. Collected 05/15/1995 in Oklahoma, United States. Payne County; Approximately 5 miles North of Stillwater, OK. Settlement, slope 0-5%. Open, clay, seasonally dry, ridgetop. Collection area 3 sq. meters. Population is patchy and occasional; source is wild, in situ.

The following were developed by Phillip Miklas, USDA, ARS, Irrigated Agric. Research & Extension Ctr., 24106 North Bunn Road, Prosser, Washington 99350-9687, United States; Shree P. Singh, University of Idaho, Kimberly Research & Extension Ctr., 3793 North 3600 East, Kimberly, Idaho 83341-5076, United States; J. Rusty Smith, USDA-ARS, Crop Genetics and Production Research Unit, P.O. Box 345, Stoneville, Mississippi 38776, United States. Received 07/01/2005.

PI 639867. Phaseolus vulgaris L.
Breeding. Pureline. USDK-CBB-15. GP-244. Pedigree - K97305/3/ SVM-2242//I9566-21-4-2/'Montcalm'. Bred specifically for a high level of resistance to common bacterial blight as it possesses two major QTL and perhaps other minor genes that confer a high level of resistance to Xap. Possesses SAP6 and SU91 SCAR markers tightly linked with QTL derived from great northern landrace cultivar Montana No.5 and breeding line XAN 159, respectively. Exhibits a Type I determinate bush growth habit typical of kidney bean. Average weight of 100 seeds was 52 g. Matured in 98 d. Seed appearance was rated commercially acceptable for the dark red kidney market class. Also exhibits a hypersensitive resistance response to the NL-3 strain of Bean common mosaic necrosis virus (BCMNV) in greenhouse tests, which infers presence of the I gene for resistance to Bean common mosaic virus (BCMV).

The following were developed by James S. Beaver, University of Puerto Rico, Mayaguez Camp, Department of Agronomy & Soils, P. O. Box 9030, Mayaguez, Puerto Rico; Shree P. Singh, University of Idaho, Kimberly Research & Extension Ctr., 3793 North 3600 East, Kimberly, Idaho 83341-5076, United States; J.C. Nin, Centro de Investigacion Agricola del Suroeste (CIAS), Km 5 Carretera San Juan-Las Matas, San Juan De La Magua, Dominican Republic; Matthew Blair, Centro Internacional de Agricultura Tropical, A.A. 6713, Cali, Colombia; E. Prophete, Ministry of Agriculture, National Seed Program, Port Au Prince, Haiti. Received 07/18/2005.

PI 639868. Phaseolus vulgaris L.
Breeding. Pureline. RMC3. GP-243. Pedigree - `DIACOL Calima'//MAM 48/A 483/4/PVA 800A /3/EMP 376 x A 193//NW 63/A 429. Has resistance to Bean golden yellow mosaic virus (BGYMV). The presence of the SCAR marker SR2 confirmed the presence of the recessive allele bgm-1 for resistance to BGYMVand RMC-3 was resistant to BGYMV. Was also resistant to a new BGYMV-related geminivirus found recently at 1000 m elevation at Pradera, Valle, Colombia. Also had high level of resistance to rust and moderate resistance to common bacterial blight in field inoculation. Derived as an F5 breeding line by gamete selection from a multiple-parent population. This line was yield tested in Colombia and in the Caribbean in regional performance trials. The mean seed yield in field trials was 1,608 kg/ha whereas the mean seed yield of PC50 was 1,165 kg/ha. Has red mottled seed intermediate between the rounded Pompadour and the more elongated DIACOL Calima red mottled seed class with an average 100-seed weight of 34.5 g. Has an indeterminate Type II growth habit, flowers in 38 d and reaches harvest maturity in 80 d after planting in Colombia.

The following were developed by Daryl Klindworth, USDA-ARS, Northern Crop Science Lab, 1307 N. 18th St., Fargo, North Dakota 58105-5677, United States; James D. Miller, USDA-ARS, Dept. of Plant Pathology, North Dakota State University, Fargo, North Dakota, United States; Steven Xu, USDA-ARS, Northern

Crop Science Laboratory, 1307 18th St. North, Fargo, North Dakota 58105-5677, United States. Received 07/11/2005.

PI 639869. Triticum turgidum subsp. durum (Desf.) Husn.
Genetic. Pureline. RUSTY. GS-155. Pedigree - Langdon 4D(4B)/Line 47-1//Line 47-1. Released 2004. A genetic stock of durum wheat that is near-universally susceptible to wheat stem rust. Selected from a euploid BC1F3 plant having the parentage Langdon 4D(4B)/Line 47-1//Line 47-1. Derives its susceptibility to stem rust from Line 47-1 which has as its parents PI192334 and either Langdon or a Langdon aneuploid. PI192334 carries only a single thermosensitive gene that confers an intermediate infection type (IT) of 13 or 31 to pathotype, Pgt-LBBL, at low temperature (19-21EC), but an IT of 34 at temperatures above 21EC. Line 47-1 also carries this gene and this line was selected to eliminate this gene. Resembles Langdon for plant type (tall, late heading, similar spike morphology), but differs from Langdon for chaff color, having black chaff conferred by the Bg gene on chromosome 1A. Following its selection, it was included in additional trials to test thermosensitivity to Pgt-LBBL where plants were inoculated and grown under low (19-21EC) and high (21-28EC) temperatures. This line cons istently had a susceptible reaction (IT 34) at both temperatures. In addition to trials with Pgt-LBBL, it has been tested for stem rust reaction to pathotypes Pgt-TPMK, -THTS, -TMLK, -TCMJ, -RTQQ, -MCCF, -QTHJ, -QCCJ, -HKHJ, and -JCMN, and was found to have a susceptible reaction (IT 34 or 4) to each pathotype.

The following were developed by Dolores W. Mornhinweg, USDA, ARS, Plant Science Research Laboratory, 1301 N. Western Street, Stillwater, Oklahoma 74075, United States; Darrell M. Wesenberg, USDA, ARS, National Small Grains Germplasm, Research Facility, Aberdeen, Idaho 83210, United States; David R. Porter, USDA, ARS, 1301 N. Western Road, Stillwater, Oklahoma 74075-2714, United States; Charles A. Erickson, USDA, ARS, National Small Grains Collection, 1691 S 2700 W, Aberdeen, Idaho 83210, United States; Don Obert, USDA-ARS, 1691 S. 2700 W., Aberdeen, Idaho 83210, United States. Received 07/18/2005.

PI 639870. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. STARS 0501B. GP-137. Pedigree - Schuyler*4/R011. A 6-rowed, winter feed barley with high tolerance to Russian wheat aphid (RWA). On Webster's scale of 1-9, where 1=immune and 9=dead, it is rated 2 in greenhouse seedling screenings. Greenhouse and field testing has shown this resistance to persist throughout the life of the plant. The source of resistance in this germplasm is derived from CI 10867. Even in the absence of RWA, it yields 100% of its recurrent parent, Schuyler.

PI 639871. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. STARS 0502B. GP-138. Pedigree - Schuyler*4/R001. A 6-rowed, winter feed barley with high tolerance to Russian wheat aphid (RWA). On Webster's scale of 1-9, where 1=immune and 9=dead, it is rated 2 in greenhouse seedling screenings. Greenhouse and field testing has shown this resistance to persist throughout the life of the plant. The source of resistance in this germplasm is derived from CI 1412. Even in the absence of RWA, it yields 99% of its recurrent parent, Schuyler.

PI 639872. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. STARS 0503B. GP-139. Pedigree - Schuyler*4/R035. A

6-rowed, winter feed barley with high tolerance to Russian wheat aphid (RWA). On Webster's scale of 1-9, where 1=immune and 9=dead, it is rated 3 in greenhouse seedling screenings. Greenhouse and field testing has shown this resistance to persist throughout the life of the plant. The source of resistance in this germplasm is derived from CI 6347. Even in the absence of RWA, it yields 106% of its recurrent parent, Schuyler.

PI 639873. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. STARS 0504B. GP-140. Pedigree - Schuyler*4/R037. A 6-rowed, winter feed barley with high tolerance to Russian wheat aphid (RWA). On Webster's scale of 1-9, where 1=immune and 9=dead, it is rated 3 in greenhouse seedling screenings. Greenhouse and field testing has shown this resistance to persist throughout the life of the plant. The source of resistance in this germplasm is derived from CI 10684. Even in the absence of RWA, it yields 113% of its recurrent parent, Schuyler.

PI 639874. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. STARS 0505B. GP-141. Pedigree - Schuyler*4/R017. A 6-rowed, winter feed barley with high tolerance to Russian wheat aphid (RWA). On Webster's scale of 1-9, where 1=immune and 9=dead, it is rated 2 in greenhouse seedling screenings. Greenhouse and field testing has shown this resistance to persist throughout the life of the plant. The source of resistance in this germplasm is derived from CI 10721. Even in the absence of RWA, it yields 102% of its recurrent parent, Schuyler.

PI 639875. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. STARS 0506B. GP-142. Pedigree - Schuyler*4/R049. A 6-rowed, winter feed barley with high tolerance to Russian wheat aphid (RWA). On Webster's scale of 1-9, where 1=immune and 9=dead, it is rated 3 in greenhouse seedling screenings. Greenhouse and field testing has shown this resistance to persist throughout the life of the plant. The source of resistance in this germplasm is derived from CI 9990. Even in the absence of RWA, it yields 102% of its recurrent parent, Schuyler.

PI 639876. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. STARS 0507B. GP-143. Pedigree - Schuyler*4/R009. A 6-rowed, winter feed barley with high tolerance to Russian wheat aphid (RWA). On Webster's scale of 1-9, where 1=immune and 9=dead, it is rated 2 in greenhouse seedling screenings. Greenhouse and field testing has shown this resistance to persist throughout the life of the plant. The source of resistance in this germplasm is derived from CI 6925. Even in the absence of RWA, it yields 96% of its recurrent parent, Schuyler.

The following were developed by Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States. Received 07/25/2005.

PI 639877. Triticum turgidum subsp. durum (Desf.) Husn.
Genetic. Pureline. N02Y3003; NSGC 9528. Pedigree - Langdon 6D(6B)/PI471075//Cando/3/Vic.

PI 639878. Triticum turgidum subsp. durum (Desf.) Husn.
Genetic. Pureline. N02Y3005; NSGC 9529. Pedigree - Langdon 6D(6B)/PI471075//Cando/3/Vic.

PI 639879. Triticum turgidum subsp. durum (Desf.) Husn.
Genetic. Pureline. N02Y3009; NSGC 9530. Pedigree - PI467024/2*Langdon 6D(6B)/Vic.

PI 639880. Triticum turgidum subsp. durum (Desf.) Husn.
Genetic. Pureline. N02Y3012; NSGC 9531. Pedigree - PI467024/2*Langdon 6D(6B)/Vic.

PI 639881. Triticum turgidum subsp. durum (Desf.) Husn.
Genetic. Pureline. N02Y3014; NSGC 9532. Pedigree - PI467024/2*Langdon 6D(6B)/Vic.

PI 639882. Triticum turgidum subsp. durum (Desf.) Husn.
Genetic. Pureline. N02Y3015; NSGC 9533. Pedigree - PI467024/2*Langdon 6D(6B)/Vic.

PI 639883. Triticum turgidum subsp. durum (Desf.) Husn.
Genetic. Pureline. N02Y3021; NSGC 9534. Pedigree - KS91WGRC14/3/Cando/PI471075//Monroe.

PI 639884. Triticum turgidum subsp. durum (Desf.) Husn.
Genetic. Pureline. N02Y3022; NSGC 9535. Pedigree - KS91WGRC14/3/Cando/PI471075//Monroe.

The following were developed by Paul Signorotti, Golden Gale Hop Ranches, Inc., 50805 North McDonald Road, Prosser, Washington 99350-9639, United States. Received 06/28/2005.

PI 639885. Humulus lupulus L.
Cultivar. Pureline. "GALENA SUPER"; SSS9908. Pedigree - Selected from a controlled mating of proprietary female hop plant `SSS9801' and an unpatented male hop variety, USDA 19058m as part of a planned breeding program. The parents of 9801 are Galena and a male progeny of open pollinated Nugget. A novel powdery mildew resistant cultivar, which exhibits exceptional consistency and phenotypic stability over various growing conditions. The variety is related to Galena, and has similar attributes, such as relatively high percentage of alpha-acids, high ratio of alpha-acids to beta-acids, high total oil content, high humulene content, low farnesene, and a moderate, pleasant aroma. The plants are consistent in gross morphology and high yield over variable seasonal conditions; harvest maturity is late, after Galena and Nugget. Cones are numerous, compact and medium size, favoring harvest and post-harvest processing. Time of training bines to trellis shows little effect on plant stature, cone set and yield. Distinguishing morphological features of the plant include: Fertile, vigorous green vine, cylindrical gross plant shape on high-trellis; bine color, yellow green rgb=#99CC32; stripe absent; stipule direction, bine average diameter, 0.90; average internode length -23.9(+or-)2.3(n=5); leaf arrangement, opposite; leaf shape, palmate, average length, 11.6(+or-)302(n=17); average width, 10.5(+or-)4.3(n=17); number of leaf lobes 1-5; margin serrate; average serrations per cm 3(+or-)0.1(n=5); leaf pose, downward; average petiole length, 6.8(+or-)4.1(n=7); palmate venation; green leaf vein color. Attributes of cones, include: (1) average length, 4.1(+or-)0.6(n=17); (2) average diameter, 1.3(+or-)0.3(n=17); average number of cones per basal lateral node, 446(+or-)103(n=3); cone color green; cone shape, ovate to cylindrical;

cone compactness, compact; average cone weight, 203 mg; bract shape, ovate; bract tip shape, acute; bract tip position, appressed; bracteole shape, lancelate; harvest maturity, late, similar to Nugget; shattering potential at harvest, low, similar to Nugget; and aroma, mild. Distinguishing chemical traits of the cultivar: Alpha acids (dry weight basis), 15.2%; beta acids, 8.8%; alpha/beta ratio, 1.7; cohumulone (% of alpha acids), 37.5%; alpha loss.

The following were developed by Adam J. Lukaszewski, University of California, Dept. of Botany & Plant Science, Riverside, California 92521-0124, United States. Received 07/22/2005.

PI 639886. Triticum turgidum subsp. durum (Desf.) Husn. Breeding. Pureline. UCRD05-1; Ag1-22. GP-805. Pedigree - Chinese Spring 7D.7Ag#1/*2 Pavon ph1b//*2Pavon/3/Opata/4/*2Aconchi/5/*2UC1113. A line of durum wheat with a translocation 1-22 of a segment of chromosome 7EL from Agropyron elongatum to chromosome 7A. The A. elongatum segment carries a leaf rust resistance gene Lr19 and a locus for yellow flour pigment, Y. For the genetic map position of the translocation breakpoint see Zhang et al (2005): Molecular characterization of durum and common wheat recombinant lines carrying leaf rust resistance (Lr19) and yellow pigment (Y) genes from Lophopyrum ponticum. Theor. Appl. Genet., P ublished On Line May 24, 2005.

PI 639887. Triticum turgidum subsp. durum (Desf.) Husn. Breeding. Pureline. UCRD05-2; Ag1-23. GP-806. Pedigree - Chinese Spring 7D.7Ag#1/*2 Pavon ph1b//*2Pavon/3/Opata/4/*2Aconchi/5/*2UC1113. A line of durum wheat with a translocation 1-23 of a segment of chromosome 7EL from Agropyron elongatum to chromosome 7A. The A. elongatum segment carries a leaf rust resistance gene Lr19 and a locus for yellow flour pigment, Y. For the genetic map position of the translocation breakpoint see Zhang et al (2005): Molecular characterization of durum and common wheat recombinant lines carrying leaf rust resistance (Lr19) and yellow pigment (Y) genes from Lophopyrum ponticum. Theor. Appl. Genet., Pu blished On Line May 24, 2005.

PI 639888. Triticum turgidum subsp. durum (Desf.) Husn. Breeding. Pureline. UCRD05-3; Aconchi MA1. GP-807. Pedigree - Pavon MA1/Opata//4*Aconchi. A line of durum wheat with translocation 1RS.1BL from the Kavkaz/Aurora origin, engineered cytogenetically to introduce the Gli-B1 and Glu-B3 loci from 1BS of wheat and to remove the Sec-1 locus of rye. Cytogenetic engineering of the translocation was performed in bread wheat, and the engineered chromosome, MA1, was transferred to durum cv. Aconchi by backcrosses.

The following were developed by Brian Baldwin, Mississippi State University, Department of Plant and Soil Sciences, 32 Creelman Road, Mississippi State, Mississippi 39762, United States; Jeff Hollowell, Mississippi State University, Plant & Soil Sciences, Box 9555, Mississippi State, Mississippi 39762, United States; Jeff Mosley, Mississippi State University, Box 9555, Mississippi State, Mississippi 39762, United States; Robert Cossar, Mississippi State University, Plant & Soil Science, 117 Dorman Hall, Mississippi State, Mississippi 39762, United States. Received 07/21/2005.

PI 639889. Hibiscus cannabinus L.
Cultivar. "Whitten"; DRC96-1. CV-1. Pedigree - 'Whitten' was derived and selected as a single plant from the S2(F3) segregating array of a cross of E41 (PI 532873) and a powdery mildew (Leveillula taurica) resistant selection of 'Guatemala 45' made during the 1994 growing season. Seed of a single plant was increased under greenhouse conditions. 'Whitten' kenaf was developed and released by the Mississippi Agricultural and Forestry Experiment Station (MAFES) in 2005. Whitten, known experimentally as DRC96-1, was selected for: 1. juvenile (simple) leaf shape, 2. plant height, a gross indicator of yield, 3. resistance to powdery mildew caused by Leveillula taurica, and 4. extended juvenility. Average total stalk yield of Whitten is greater than Everglades 41. Mean bast fiber percentage is 34.3%. Determination of bast yield per hectare as a function of total stalk yield indicates higher bast turnout (per hectare) from Whitten.

The following were developed by Terra Protect Seeds GmbH, Germany. Received 08/08/2005.

PI 639890 PVPO. Raphanus sativus var. oleiformis Pers.
"Defender". PVP 200500281.

The following were developed by Pure Seed Testing, Inc., P.O. Box 449, Hubbard, Oregon 97032, United States. Received 08/08/2005.

PI 639891 PVPO. Poa pratensis L.
Cultivar. Apomictic. "Dynamo". PVP 200500292.

The following were developed by Pure Seed Testing, Inc., United States. Received 08/08/2005.

PI 639892 PVPO. Poa pratensis L.
Cultivar. Apomictic. "Moonshine". PVP 200500306.

PI 639893 PVPO. Poa pratensis L.
Cultivar. Apomictic. "Moon Beam". PVP 200500315.

PI 639894 PVPO. Poa pratensis L.
Cultivar. Apomictic. "Blue Max". PVP 200500317.

PI 639895 PVPO. Lolium perenne L.
Cultivar. "Gray Star". PVP 200500313.

The following were developed by C.A. Rose-Fricker, Pure Seed Testing, Inc., 3057 G Street, Hubbard, Oregon 97032, United States; Melodee L. Fraser, Pure Seed Testing, Inc., P.O. Box 176, 606 Main Street, Rolesville, North Carolina 27571, United States; William A. Meyer, Rutgers University, Plant Biology & Pathology Department, Foran Hall, 59 Dudley Road, New Brunswick, New Jersey 08903-0231, United States; Pure Seed Testing, Inc., United States. Received 08/08/2005.

PI 639896. Lolium perenne L.
Cultivar. "Silver Dollar"; PST 2J$. CV-245; PVP 200500314. Pedigree - An

advanced generation synthetic produced from following maternal sources: 88% to PST-2BR (Citation Fore), 5% to PST-2JH, 5% to PST-2M4, 2% to unidentified source. Has mean initial heading date 5 d earlier than Citation Fore. Has mean flag leaf width of 2.4, 0.3 mm wider than Citation Fore. Has exhibited resistance to gray leaf spot under heavy disease pressure. Has shown resistance to crown rust. Has shown good turf quality in trials in Oregon. Has shown resistance to stem rust. Seed weight is 1588 mg per 1000 sd. Seed length is 049 mm and seed width 012 mm. Seed size and weight is larger than Citation Fore. Plant height is 70.3 cm; top flag leaf height is 43.6 cm; flag leaf sheath length is 9.6 cm. Spike length is 15.1; tiller leaf length 11.7 cm; tiller leaf width 2.3 mm. Flag leaf length 9.7 cm. Tiller count 99.6 (#/100 cm2).

The following were developed by Advanta Seeds Pacific, Inc., Oregon, United States. Received 08/08/2005.

PI 639897 PVPO. Lolium perenne L.
Cultivar. "SR 4550". PVP 200500294.

The following were developed by Rutgers, The State University of New Jersey, New Jersey, United States. Received 08/08/2005.

PI 639898 PVPO. Lolium perenne L.
Cultivar. "Dazzle". PVP 200500309.

The following were developed by The Scotts Company, United States. Received 08/08/2005.

PI 639899 PVPO. Festuca arundinacea Schreb.
Cultivar. "Coyote II". PVP 200500303.

The following were developed by North Dakota State University Research Foundation, North Dakota, United States. Received 08/08/2005.

PI 639900 PVPO. Phaseolus vulgaris L.
Cultivar. Pureline. "Eclipse". PVP 200500293.

The following were developed by Seminis Vegetable Seeds, Inc., United States. Received 08/08/2005.

PI 639901 PVPO. Lactuca sativa L.
Cultivar. "Tourist". PVP 200500296.

The following were developed by Enza Zaden Beheer B.V., Netherlands. Received 08/08/2005.

PI 639902 PVPO. Lactuca sativa L.
Cultivar. "Salad Pak". PVP 200500307.

The following were developed by Pioneer Hi-Bred International, Des Moines, Iowa, United States. Received 08/08/2005.

PI 639903. Helianthus annuus L.
T00A3. PVP 200500297.

PI 639904. Helianthus annuus L.
D0252QM. PVP 200500298.

PI 639905. Helianthus annuus L.
R99S8LG. PVP 200500299.

The following were developed by Agrigenetics, Inc. d/b/a/ Mycogen Seeds, United States. Received 08/08/2005.

PI 639906. Zea mays L.
4XA312. PVP 200500300.

The following were developed by Michigan State University, Michigan Agr. Exp. Sta., East Lansing, Michigan 48824, United States. Received 08/08/2005.

PI 639907 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "MSU D8006". PVP 200500308. Pedigree - 2555/Lowell.

The following were developed by Dave Burrup, USDA-ARS, PO Box 307, Aberdeen, Idaho 83210, United States; Darrell M. Wesenberg, USDA, ARS, National Small Grains Germplasm, Research Facility, Aberdeen, Idaho 83210, United States; J.C. Whitmore, University of Idaho, Tetonia Research & Extension Center, 888 West Highway 33, Newdale, Idaho 83436, United States; Charles A. Erickson, USDA, ARS, National Small Grains Collection, 1691 S 2700 W, Aberdeen, Idaho 83210, United States; Berne L. Jones, USDA, ARS, Cereal Crops Research Unit, 501 North Walnut Street, Madison, Wisconsin 53705-2334, United States; Don Obert, USDA-ARS, 1691 S. 2700 W., Aberdeen, Idaho 83210, United States. Received 08/12/2005.

PI 639908. Hordeum vulgare L. **subsp. vulgare**
Cultivar. Pureline. "SUBLETTE"; 90Ab241; NSGC 9536. CV-323. Pedigree - A517/2*Harrington ; A517 = selection from WA9037-75 (Klages/4/Betzes/Heines Hanna//Piroline (WA7698-62)/3/Foma (WA8537-68)). Released 2005. Two-rowed spring malting barley. Sublette has semi-smooth awns with a medium-lax spike. The kernel has long rachilla hairs and white aleurone. It is adapted to both irrigated and dry land conditions in the U.S. Intermountain West.

The following were developed by D&PL Technology Holding Company, LLC, Scott, Mississippi, United States. Received 08/08/2005.

PI 639910. Gossypium hirsutum L.
"DP515BG/RR";. PVP 200500310.

The following were collected by Barbara Hellier, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington

99164-6402, United States; Philipp W. Simon, USDA, ARS, Vegetable Crops Research Unit, University of Wisconsin, Department of Horticulture, Madison, Wisconsin 53706, United States. Received 02/16/2005.

PI 639911. Allium cepa L.
Cultivated. Z025; Karatou. Collected 08/01/2004 in Tashkent, Uzbekistan. Chorsu Market, Tashkent. Red onion, variety Karatal.

PI 639912. Allium cepa L.
Cultivated. Z046; Spanish. Collected 08/01/2004 in Andijon, Uzbekistan. Old Market, Andijon. White onion, torpedo shaped with mild flavor.

PI 639913. Allium cepa L.
Cultivated. Z050; Spanish. Collected 08/06/2004 in Namangan, Uzbekistan. Central Market, Namangan. White onion, torpedo shaped.

PI 639914. Allium cepa L.
Cultivated. Z051; Kazil. Collected 08/06/2004 in Namangan, Uzbekistan. Central Market, Namangan. Red onion. Potential mix of yellow and red types with size and shape variation.

PI 639915. Allium cepa L.
Cultivated. Z072. Collected 08/01/2004 in Samarqand, Uzbekistan. Siyob Bazar, Samarkand. Yellow onion.

PI 639916. Allium cepa L.
Cultivated. Z073. Collected 08/01/2004 in Samarqand, Uzbekistan. Siyob Bazar, Samarkand. White onion.

The following were developed by Linda Hanson, USDA, ARS, Sugarbeet Research Unit, Crops Research Lab., Fort Collins, Colorado 80526-2083, United States; Lee Panella, USDA, ARS, Crops Research Lab, Sugarbeet Research Unit, Fort Collins, Colorado 80526-2083, United States. Received 08/04/2005.

PI 639917. Beta vulgaris L. **subsp. vulgaris**
Breeding. Population. FC723; 19951016HO. GP-259. Pedigree - FC723 has FC708 as one parent, and the other parent is EL44, selected for BCTV resistance and characters which enhance pollen and seed production. Has good resistance to root-rotting strains of Rhizoctonia and intermediate resistance to cercospora leaf spot, but is not resistant to the Beet curly top virus. It is a population from which to select rhizoctonia and cercospora resistant, monogerm, O-type parents to infuse some rhizoctonia and leaf spot resistance on the female side of hybrids. It is released from seed production 951016HO.

PI 639918. Beta vulgaris L. **subsp. vulgaris**
Breeding. Population. FC723CMS; 19951016HO1. GP-259cms. Pedigree - FC723CMS is the genetic-cytoplasmic male sterile (CMS) equivalent of FC723 backcrossed seven times. The original cross was EL44CMS/ FC708. It was backcrossed continually to the populations from which FC723 was derived, and went through five generations of cyclic mass selection for rhizoctonia root rot resistance. Has good resistance to root-rotting strains of Rhizoctonia and intermediate resistance to cercospora leaf spot, but is not resistant to the Beet curly top virus. It is a population from which to select rhizoctonia and cercospora resistant, monogerm, O-type parents to infuse some rhizoctonia and leaf spot

resistance on the female side of hybrids, and FC723CMS provides a CMS female with these characteristics. Released from seed production 951016HO1.

The following were developed by Gary L. Windham, USDA, ARS, Crop Science Research Lab., P. O. Box 5367, Mississippi State, Mississippi 39762, United States; W. Paul Williams, USDA-ARS-CHPRRU, Box 9555, 344 Dorman Hall, Mississippi State, Mississippi 39762, United States. Received 08/03/2005.

PI 639919. Zea mays L.
Breeding. Inbred. Mp717; Mp92:673. GP-456. Pedigree - Developed form a cross of Mp420 and Tx601 through eight generations of self-pollination and selection for reduced levels of aflatoxin contamination. Developed and released as a source of resistance to Aspergillus flavus infection and aflatoxin accumulation. Developing ears were inoculated with an A. flavus spore suspension 7 to 14 d after silk emergence. Ears were harvested at maturity, and grain was analyzed for aflatoxin contamination. Flowers approximately 7d earlier than Mp313E and 14 d earlier than Mp715. Mp313E and Mp715 were also released as sources of resistance to A. flavus/aflatoxin. This release has yellow kernels and white cobs. Plants are approximately 1.6 m tall.

The following were developed by Yasumichi Terada, Department of Plant Breeding, National Grasslands Research Institute, 768 Nishinasuno, Nasu-Gun, Tochigi 329-27, Japan; Masaaki Katsura, National Agric. Research Center - Kyushu Okinawa Region, 2421 Suya, Koshi, Kumamoto 861-1192, Japan; Bryan Kindiger, USDA, ARS, Grazinglands Research Laboratory, 7207 West Cheyenne Street, El Reno, Oklahoma 73036, United States; M. Gau, National Agricultural Research Center, Kyusyu Okinawa Region, Suya 2421, Kikuchi, Kumamoto 861-1102, Japan; H. Hasegawa, Japan Grassland Agriculture and Forage Seed Assoc., 406 Higashi-Nopporo, Ebetsu, Japan; Y. Ueyama, National Agricultural Research Center for Tohoku Region, 4 Akahira, Shimokuriyagawa, Morioka, Iwate 020-0198, Japan; K. Goto, National Agricultural Research Center, Kyusyu Okinawa Region, Suya 2421, Kikuchi, Kumamoto 861-1102, Japan; S. Sato, Japan Grassland Agriculture and Forage Seed Assoc., 406 Higashi-Nopporo, Ebetsu, Japan; T. Yoshiyama, Japan Grassland Agriculture and Forage Seed Assoc, 406-Higashi-Nopporo, Ebetsu, Japan; Y. Tsurumi, Japan Grassland Agriculture and Forage Seed Assoc., Kumamoto Branch, Koshi, Kumamoto, Japan; K. Nakashima, Japan Grassland Agriculture and forage Seed Assoc., Kumamoto Branch, Koshi, Kumamoto, Japan. Received 08/18/2005.

PI 639920. Festuca arundinacea Schreb.
Cultivar. "NANRYO". CV-96. Pedigree - Developed from a breeder's block composed of 8 clones; 2 selected clones from cultivars Fawn, Kentucky 31; 1 selected clone from cultivars Rozelle, Electa (Netherlands), Krasnadorskaja (local ecotype from Krasnadorskaja region, Russia) and Yamanami. An early maturing, endophyte-free, medium-green, upright tall fescue that has shown good forage quality and production in trials in Japan and Oklahoma. Maintains good summer density, persistence and exceptional tolerance to drought and heat induced stress. The lack of the toxic endophyte should result in the reduction or omission of fescue toxicosis in grazing livestock. The early vigor and spring forage productivity make Nanryo a useful tall fescue cultivar for graze-plus-grain grazing system where livestock is rotated in the early spring from a dual purpose wheat pasture to a cool-season grass forage

pasture in order to obtain a grain crop and continue feeding grazing livestock. It should be productive in most regions of the USA where tall fescue is an adapted and productive grass forage for grazing livestock.

The following were developed by Robert H. Busch, USDA, ARS, University of Minnesota, Dept. of Agronomy & Plant Genetics, St. Paul, Minnesota 55108, United States; Don V. McVey, USDA, ARS, University of Minnesota, Cereal Rust Laboratory, St. Paul, Minnesota 55105, United States; G. Hareland, USDA, ARS, Fargo, North Dakota 58105, United States; G. Linkert, University of Minnesota, St. Paul, Minnesota 55108, United States; Ruth Dill-Macky, University of Minnesota, Department of Plant Pathology, 495 Borlaug Hall, St. Paul, Minnesota 55108, United States; J.A. Anderson, University of Minnesota, Department of Agronomy & Plant Genetics, 411 Borlaug Hall, St. Paul, Minnesota 55108, United States; James Kolmer, USDA-ARS, Cereal Disease Laboratory, 1551 Lindig, St. Paul, Minnesota 55108, United States; Yue Jin, USDA, ARS, University of Minnesota, Cereal Disease Lab, St. Paul, Minnesota 55108, United States; J.V. Wiersma, University of Minnesota, Crookston, Minnesota 56716, United States. Received 08/22/2005.

PI 639921. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "ULEN". CV-984; PVP 200600060. Pedigree - MN92044 / HJ98. Has erect juvenile plant growth, a recurved flag leaf, white glumes with oblique shoulder and acuminate beak. Spike is awned, mid-dense and tapering. Kernel is red and ovate in shape with angular cheeks and narrow, mid-deep crease. The brush on the kernel has a collar and is medium in length. Relatively early maturing and produces spikes 2.3 d earlier than HJ98. Averages 87 cm for plant height. Has medium straw strength and a lodging rating of 2.5 when scored on a scale of 0 (erect) to 9 (lodged) in 21 environments at which lodging occurred from 2000 through 2004. Moderately susceptible to Fusarium head blight (FHB, caused primarily by Fusarium graminearum) in misted, inoculated field nurseries. In 11 FHB nurseries from 2001 through 2004, Ulen averaged 32% diseased spikelets, 22% visually scabby kernels (VSK), and 12.6 mg kg-1 of the mycotoxin deoxynivalenol (DON). Resistant to currently prevalent races of stem rust (caused by Puccinia graminis) as seedlings in greenhouse tests and as adults in field tests with the same races. Moderately resistant to prevalent races of leaf rust (caused by Puccinia triticina). Had an average grain volume wt. of 783 kg m-3, grain protein of 146 g kg-1, and load volume of 211 cm3. Compared to HJ98, Ulen is 15 kg m-3 higher in grain volume wt, 10 g kg-1 higher in grain protein, and 4% greater in loaf voluem. Ulen's average mixograph score was 3.2 on a 1-9 scale (1=weakest, 9=strongest). Moderately susceptible to preharvest sprouting.

The following were developed by Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States; P. Stephen Baenziger, University of Nebraska, Department of Agronomy, 362D Plant Science Bldg., Lincoln, Nebraska 68583-0915, United States; David D. Baltensperger, University of Nebraska, Panhandle Research, & Extension Center, Scottsbluff, Nebraska 69361-4939, United States; John E. Watkins, University of Nebraska, Dept. of Plant Pathology, Lincoln, Nebraska 68583, United States; J. Krall, University of Wyoming, Research & Extention Center, R.1, Box 374, Torrington, Wyoming 88420, United States; Lenis A. Nelson, University of Nebraska, Department of Agronomy, 342 Keim Hall - E. Campus, Lincoln, Nebraska 68583, United States; Ming-Shun Chen, USDA-ARS-GMPRC-PSERU,

Wheat Insect Genetics Lab, 4008 Throckmorton Hall, Manhattan, Kansas 66506, United States; Yue Jin, USDA, ARS, University of Minnesota, Cereal Disease Lab, St. Paul, Minnesota 55108, United States; Guihua Bai, USDA-ARS, 4008 Throckmorton Hall, Kansas State University, Manhattan, Kansas 66506, United States; Brian Beecher, USDA-ARS, E-202 Food Quality Building, Washington State University, Pullman, Washington 99164-6394, United States; D.J. Lyon, University of Nebraska, Dept. of Agronomy and Horticulture, Lincoln, Nebraska 68583, United States; A.R. Martin, University of Nebraska, Dept. of Agronomy and Horticulture, Lincoln, Nebraska 68583, United States. Received 08/24/2005.

PI 639922. Triticum aestivum L. **subsp. aestivum**

Cultivar. Pureline. "INFINITY CL"; NH01046. CV-982; REST 639922; PVP 200600172. Pedigree - Selected from the cross 'Windstar' // 'Millennium' sib / 'Above' sib. Awned, white-glumed cultivar. Field appearance is most similar to Windstar. After heading, the canopy is moderately open and upright. Flag leaf is erect and twisted at the boot stage. Foliage is dark green with a waxy bloom on the flag leaf, leaf sheath, and spike at anthesis. Leaves are pubescent. Spike is tapering in shape, narrow, mid-long to long, and middense. Glume is midlong and midwide and glume shoulder is narrow to midwide and square. Beak is medium in length with an acuminate to acute tip. Spike is nodding at maturity. Kernels are red colored, hard textured, and ovate in shape. Kernel is collarless with a large brush of medium length, rounded cheeks, large germ, and narrow and shallow crease. Moderately resistant to stem rust (caused by Puccinia graminis); most likely containing genes Sr6, Sr10, or Sr17 (which alone are no longer effective), and Sr24. Moderately resistant to leaf rust (caused by P. triticina), and stripe rust (caused by P. striiformis). Seedlings are susceptible to Hessian fly (Mayetiola destructor) and wheat soilborne mosaic virus but may contain a low level of tolerance to wheat streak mosaic virus.

The following were developed by James S. Quick, Colorado State University, Soil and Crop Sciences, Fort Collins, Colorado 80523, United States; O.K. Chung, USDA-ARS, U.S. Grain Marketing Research Lab., Hard Winter Wheat Quality Lab., Manhattan, Kansas 66506, United States; Frank Peairs, Colorado State University, Dept. of Bioagricultural Sciences & Pest Management, Fort Collins, Colorado 80523-1177, United States; J.B. Rudolph, Colorado State University, Dept. of Entomology, Fort Collins, Colorado 80523, United States; John Stromberger, Colorado State University, Dept. of Soil and Crop Sciences, 1170 Campus Delivery, Fort Collins, Colorado 80523, United States; B.W. Seabourn, USDA, ARS, Grain Marketing and Production Research Center, Hard Winter Wheat Quality Lab., Manhattan, Kansas 66506, United States; Scott D. Haley, Colorado State University, Soil and Crop Sciences Department, 1170 Campus Delivery, Fort Collins, Colorado 80523, United States; J.J. Johnson, Colorado State University, Dept. of Soil and Crop Sciences, Fort Collins, Colorado 80523, United States; James Kolmer, USDA-ARS, Cereal Disease Laboratory, 1551 Lindig, St. Paul, Minnesota 55108, United States; Sally Clayshulte, Colorado State University, Dept. of Soil and Crop Sciences, Plant Science Building W18, Fort Collins, Colorado 80523, United States; B. Clifford, Colorado State University, Dept. of Soil and Crop Sciences, Fort Collins, Colorado 80523, United States; Yue Jin, USDA, ARS, University of Minnesota, Cereal Disease Lab, St. Paul, Minnesota 55108, United States; AGSECO, Girard, Kansas, United States; P.H. Westra, Colorado State University, Bioagricultural Sciences and Pest Management, Fort Collins, Colorado 80523, United States. Received 09/13/2005.

PI 639923. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "PROTECTION"; CO991132. CV-980; PVP 200500338; REST 639923. Pedigree - Jagger // TXGH12588-120*4 / FS2. Released 2004. Carries the patented Als1 gene that confers tolerance to imazamox herbicide. Is an awned, bronze-chaffed, early maturing, semidwarf, hard red winter wheat. Shattering tolerance and winterhardiness are both good while straw strength is good. Moderately resistant to stem rust (caused by Puccinia graminis; composite of races QFCS, QTHJ, RCRS, TPMK, and TTTT), susceptible to leaf rust (caused by Puccinia triticina; composite of races MLRT, MFBP, TKBP, TDGT, and KBQT), resistant to stripe rust (caused by Puccinia striiformis; natural field infection), susceptible to Wheat streak mosaic virus, and heterogeneous for resistance to Wheat soilborne mosaic virus. Susceptible to the Great Plains biotype of Hessian fly (Mayetiola destructor) and susceptible to the Russian wheat aphid [Diuraphis noxia].

The following were developed by James S. Quick, Colorado State University, Soil and Crop Sciences, Fort Collins, Colorado 80523, United States; O.K. Chung, USDA-ARS, U.S. Grain Marketing Research Lab., Hard Winter Wheat Quality Lab., Manhattan, Kansas 66506, United States; Frank Peairs, Colorado State University, Dept. of Bioagricultural Sciences & Pest Management, Fort Collins, Colorado 80523-1177, United States; J.B. Rudolph, Colorado State University, Dept. of Entomology, Fort Collins, Colorado 80523, United States; John Stromberger, Colorado State University, Dept. of Soil and Crop Sciences, 1170 Campus Delivery, Fort Collins, Colorado 80523, United States; B.W. Seabourn, USDA, ARS, Grain Marketing and Production Research Center, Hard Winter Wheat Quality Lab., Manhattan, Kansas 66506, United States; Colorado Wheat Research Foundation, Colorado, United States; Scott D. Haley, Colorado State University, Soil and Crop Sciences Department, 1170 Campus Delivery, Fort Collins, Colorado 80523, United States; J.J. Johnson, Colorado State University, Dept. of Soil and Crop Sciences, Fort Collins, Colorado 80523, United States; James Kolmer, USDA-ARS, Cereal Disease Laboratory, 1551 Lindig, St. Paul, Minnesota 55108, United States; Sally Clayshulte, Colorado State University, Dept. of Soil and Crop Sciences, Plant Science Building W18, Fort Collins, Colorado 80523, United States; B. Clifford, Colorado State University, Dept. of Soil and Crop Sciences, Fort Collins, Colorado 80523, United States; Yue Jin, USDA, ARS, University of Minnesota, Cereal Disease Lab, St. Paul, Minnesota 55108, United States; P.H. Westra, Colorado State University, Bioagricultural Sciences and Pest Management, Fort Collins, Colorado 80523, United States; A. Giura, Agric. Res. Dev. Inst., Fundulea, Romania. Received 09/13/2005.

PI 639924. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "BOND CL"; CO00D007. CV-979; PVP 200500339; REST 639924. Pedigree - Yumar // TXGH12588-120*4 / FS2. Released 2004. Doubled-haploid line developed using the wheat x maize (Zea mays) hybridization method. Carries the patented Als1 gene that confers tolerance to imazamox herbicide. Awned, white-chaffed, medium maturing, semidwarf, hard red winter wheat. Shattering tolerance and winterhardiness are both good while straw strength is average. Moderately susceptible to stem rust (caused by Puccinia graminis; composite of races QFCS, QTHJ, RCRS, TPMK, and TTTT), moderately susceptible to leaf rust (caused by Puccinia triticina; composite of races MLRT, MFBP, TKBP, TDGT, and KBQT), moderately susceptible to stripe rust (caused by Puccinia striiformis; natural field infection),

and moderately susceptible to Wheat streak mosaic virus. Resistant to greenbug [Schizaphis graminum] biotype E, and susceptible to the Great Plains biotype of Hessian fly [Mayetiola destructor]. Resistant to the original North American biotype (designated as biotype 1) of the Russian wheat aphid [Diuraphis noxia].

The following were developed by A. Menkir, International Institute of Tropical Agriculture, Oyo Road, PMB 5320, Ibadan, Oyo, Nigeria; Baffour Badu-Apraku, International Institute of Tropical Agriculture, c/o L.W. Lambourne & Co., Carolyn House, Cryodon, England CR9 3EE, United Kingdom; J.G. Kling, International Institute of Tropical Agriculture, Oyo Road, PMB 5320, Ibadan, Oyo, Nigeria; O. Ibikunle, International Institute of Tropical Agriculture, Oyo Road, PMB 5320, Ibadan, Oyo, Nigeria. Received 09/12/2005.

PI 639925. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI101. GP-428. Pedigree - Derived from a composite TZL COMP.1-W formed by crossing TZB-SR with 7 Striga resistant inbred lines, TZI 11, TZI 9, TZI 12, TZI 13, TZI 17, TZI 24, TZI 30. The composite has undergone 6 cycles of recurrent selection under artificial infestation with S. hermonithica at 2 locations in Nigeria. Tropical lowland maize inbred line is at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, corn leaf blight (Bipolaris maydis), southern corn rust (Puccinia polysora), and maize streak virus, which are prevalent in the lowlands in West and Central Africa. This line has a semi-flint grain texture, silks in 63 days and has plant height of 157cm under artificial Striga infestation.

PI 639926. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI102. GP-429. Pedigree - Derived from a composite TZL COMP.1-W formed by crossing TZB-SR with 7 Striga resistant inbred lines, TZI 11, TZI 9, TZI 12, TZI 13, TZI 17, TZI 24, TZI 30. The composite has undergone 6 cycles of recurrent selection under artificial infestation with S. hermonithica at 2 locations in Nigeria. Tropical lowland maize inbred line is at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, corn leaf blight (Bipolaris maydis), southern corn rust (Puccinia polysora), and maize streak virus, which are prevalent in the lowlands in West and Central Africa. Has a flint grain texture, silks in 65 days, has plant height of 142cm under artificial Striga infestation.

PI 639927. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI103. GP-430. Pedigree - Derived from a composite TZL COMP.1-W formed by crossing TZB-SR with 7 Striga resistant inbred lines, TZI 11, TZI 9, TZI 12, TZI 13, TZI 17, TZI 24, TZI 30. The composite has undergone 6 cycles of recurrent selection under artificial infestation with S. hermonithica at 2 locations in Nigeria. Tropical lowland maize inbred line is at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, corn leaf blight (Bipolaris maydis), southern corn rust (Puccinia polysora), and maize streak virus, which are prevalent in the lowlands in West and Central Africa. Has a dent grain texture, silks in 67 days, has plant height of 146cm under artificial Striga infestation.

PI 639928. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI104. GP-431. Pedigree - Extracted from BC4 population involving selected accession of teosinte (Zea diploperennis)

supporting little or no S. hermonthica emergence as donor parent. Z. diploperennis accession crossed to tropical maize adapted to W.& Central Africa. F1 backcrossed to 9022-13, TZL COMP 1, SUWAN 1-SR, STR SYN-W to form Z. diploperennis BC4 pop. Tropical lowland maize inbred line is at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, corn leaf blight (Bipolaris maydis), southern corn rust (Puccinia polysora), and maize streak virus, which are prevalent in the lowlands in West and Central Africa. Has a flint grain texture, silks in 62 days, has plant height of 132cm under artificial Striga infestation.

PI 639929. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI105. GP-432. Pedigree - Extracted from BC4 population involving selected accession of teosinte (Zea diploperennis) supporting little or no S. hermonthica emergence as donor parent. Z. diploperennis accession crossed to tropical maize adapted to W.& Central Africa. F1 backcrossed to 9022-13, TZL COMP 1, SUWAN 1-SR, STR SYN-W to form Z. diploperennis BC4 pop. Tropical lowland maize inbred line is at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, corn leaf blight (Bipolaris maydis), southern corn rust (Puccinia polysora), and maize streak virus, which are prevalent in the lowlands in West and Central Africa. Has a flint grain texture, silks in 66 days, has plant height of 123cm under artificial Striga infestation.

PI 639930. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI106. GP-433. Pedigree - Extracted from BC4 population involving selected accession of teosinte (Zea diploperennis) supporting little or no S. hermonthica emergence as donor parent. Z. diploperennis accession crossed to tropical maize adapted to W.& Central Africa. F1 backcrossed to 9022-13, TZL COMP 1, SUWAN 1-SR, STR SYN-W to form Z. diploperennis BC4 pop. Tropical lowland maize inbred line is at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, corn leaf blight (Bipolaris maydis), southern corn rust (Puccinia polysora), and maize streak virus, which are prevalent in the lowlands in West and Central Africa. Has a dent grain texture, silks in 65 days, has plant height of 152cm under artificial Striga infestation.

PI 639931. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI107. GP-434. Pedigree - Extracted from BC4 population involving selected accession of teosinte (Zea diploperennis) supporting little or no S. hermonthica emergence as donor parent. Z. diploperennis accession crossed to tropical maize adapted to W.& Central Africa. F1 backcrossed to 9022-13, TZL COMP 1, SUWAN 1-SR, STR SYN-W to form Z. diploperennis BC4 pop. Tropical lowland maize inbred line is at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, corn leaf blight (Bipolaris maydis), southern corn rust (Puccinia polysora), and maize streak virus, which are prevalent in the lowlands in West and Central Africa. Has a flint grain texture, silks in 64 days, has plant height of 126cm under artificial Striga infestation.

PI 639932. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI108. GP-435. Pedigree - Extracted from BC4 population involving selected accession of teosinte (Zea diploperennis) supporting little or no S. hermonthica emergence as donor parent. Z. diploperennis accession crossed to tropical maize adapted to W.& Central

Africa. F1 backcrossed to 9022-13, TZL COMP 1, SUWAN 1-SR, STR SYN-W to form Z. diploperennis BC4 pop. Tropical lowland maize inbred line is at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, corn leaf blight (Bipolaris maydis), southern corn rust (Puccinia polysora), and maize streak virus, which are prevalent in the lowlands in West and Central Africa. Has a flint grain texture, silks in 66 days, has plant height of 125cm under artificial Striga infestation.

PI 639933. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI109. GP-436. Pedigree - Derived from 2 synthetics (STR SYN-W, STR SYN-Y) developed by inter-crossing 4 white, 4 yellow endosperm Striga resistant maize inbred lines. Synthetics improved for resistance to Striga under artificial infestation with S. hermonthica. Tropical lowland maize inbred line is at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, corn leaf blight (Bipolaris maydis), southern corn rust (Puccinia polysora), and maize streak virus, which are prevalent in the lowlands in West and Central Africa. Has a flint grain texture, silks in 59 days, has plant height of 138cm under artificial Striga infestation.

PI 639934. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI110. GP-437. Pedigree - Derived from 2 synthetics (STR SYN-W, STR SYN-Y) developed by inter-crossing 4 white, 4 yellow endosperm Striga resistant maize inbred lines. Synthetics improved for resistance to Striga under artificial infestation with S. hermonthica. Tropical lowland maize inbred line is at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, corn leaf blight (Bipolaris maydis), southern corn rust (Puccinia polysora), and maize streak virus, which are prevalent in the lowlands in West and Central Africa. Has a semi-flint grain texture, silks in 63 days, has plant height of 127cm under artificial Striga infestation.

PI 639935. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI111. GP-438. Pedigree - Derived from 2 synthetics (STR SYN-W, STR SYN-Y) developed by inter-crossing 4 white, 4 yellow endosperm Striga resistant maize inbred lines. Synthetics improved for resistance to Striga under artificial infestation with S. hermonthica. Tropical lowland maize inbred line is at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, corn leaf blight (Bipolaris maydis), southern corn rust (Puccinia polysora), and maize streak virus, which are prevalent in the lowlands in West and Central Africa. Has a semi-dent grain texture, silks in 64 days, has plant height of 123cm under artificial Striga infestation.

PI 639936. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI112. GP-439. Pedigree - Derived from early maturing (95 d) composite formed by crossing TZESR-W C3 with 8 Striga resistant inbred lines (TZI 9, TZI 13, TZI 14, TZE COMP5, TZI 17, TZI 25, TZI 26, TZI 30). Composite has undergone 7 cycles of recurrent selection under artificial infestation with S. hermonthica. Tropical lowland maize inbred line is at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, corn leaf blight (Bipolaris maydis), southern corn rust (Puccinia polysora), and maize streak virus, which are prevalent in the lowlands in West and Central Africa. Has a flint grain texture, silks in 56 days, has plant height of 126cm under artificial Striga infestation.

PI 639937. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI113. GP-440. Pedigree - Derived from early maturing (95 d) composite formed by crossing TZESR-W C3 with 8 Striga resistant inbred lines (TZI 9, TZI 13, TZI 14, TZE COMP5, TZI 17, TZI 25, TZI 26, TZI 30). Composite has undergone 7 cycles of recurrent selection under artificial infestation with S. hermonthica. Tropical lowland maize inbred line is at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, corn leaf blight (Bipolaris maydis), southern corn rust (Puccinia polysora), and maize streak virus, which are prevalent in the lowlands in West and Central Africa. Has a flint grain texture, silks in 58 days, has plant height of 118cm under artificial Striga infestation.

PI 639938. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI114. GP-441. Pedigree - Derived from early maturing (95 d) composite formed by crossing TZESR-W C3 with 8 Striga resistant inbred lines (TZI 9, TZI 13, TZI 14, TZE COMP5, TZI 17, TZI 25, TZI 26, TZI 30). Composite has undergone 7 cycles of recurrent selection under artificial infestation with S. hermonthica. Tropical lowland maize inbred line is at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, corn leaf blight (Bipolaris maydis), southern corn rust (Puccinia polysora), and maize streak virus, which are prevalent in the lowlands in West and Central Africa. Has a flint grain texture, silks in 62 days, has plant height of 122cm under artificial Striga infestation.

PI 639939. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI115. GP-442. Pedigree - Derived from early maturing (95 d) composite formed by crossing TZESR-W C3 with 8 Striga resistant inbred lines (TZI 9, TZI 13, TZI 14, TZE COMP5, TZI 17, TZI 25, TZI 26, TZI 30). Composite has undergone 7 cycles of recurrent selection under artificial infestation with S. hermonthica. Tropical lowland maize inbred line is at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, corn leaf blight (Bipolaris maydis), southern corn rust (Puccinia polysora), and maize streak virus, which are prevalent in the lowlands in West and Central Africa. Has a flint grain texture, silks in 60 days, has plant height of 129cm under artificial Striga infestation.

PI 639940. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI116. GP-443. Pedigree - Derived from early maturing (95 d) composite formed by crossing TZESR-W C3 with 8 Striga resistant inbred lines (TZI 9, TZI 13, TZI 14, TZE COMP5, TZI 17, TZI 25, TZI 26, TZI 30). Composite has undergone 7 cycles of recurrent selection under artificial infestation with S. hermonthica. Tropical lowland maize inbred line is at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, corn leaf blight (Bipolaris maydis), southern corn rust (Puccinia polysora), and maize streak virus, which are prevalent in the lowlands in West and Central Africa. Has a flint grain texture, silks in 57 days, has plant height of 98cm under artificial Striga infestation.

PI 639941. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI117. GP-444. Pedigree - Derived from early maturing (95 d) composite formed by crossing TZESR-W C3 with 8 Striga resistant inbred lines (TZI 9, TZI 13, TZI 14, TZE COMP5, TZI 17, TZI

25, TZI 26, TZI 30). Composite has undergone 7 cycles of recurrent selection under artificial infestation with S. hermonthica. Tropical lowland maize inbred line is at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, corn leaf blight (Bipolaris maydis), southern corn rust (Puccinia polysora), and maize streak virus, which are prevalent in the lowlands in West and Central Africa. Has a flint grain texture, silks in 61 days, has plant height of 123cm under artificial Striga infestation.

PI 639942. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI118. GP-445. Pedigree - Selected from a cross between two mid-altitude adapted inbred lines (TZMI101 and TZMI501) from IITA. Tropical mid-altitude maize inbred line at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, northern leaf blight (Exserohilum turcicum), common corn rust (Puccinia sorghi), and maize streak virus, which are prevalent in the mid-altitudes in West and Central Africa. Has a flint grain texture, silks in 64 days, has plant height of 132 cm under artificial Striga infestation.

PI 639943. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI119. GP-446. Pedigree - Selected from a cross between two mid-altitude adapted inbred lines (TZMI101 and TZMI501) from IITA. Tropical mid-altitude maize inbred line at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, northern leaf blight (Exserohilum turcicum), common corn rust (Puccinia sorghi), and maize streak virus, which are prevalent in the mid-altitudes in West and Central Africa. Has a flint grain texture, silks in 64 days, has plant height of 138 cm under artificial Striga infestation.

PI 639944. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI120. GP-447. Pedigree - Selected from a cross between two mid-altitude adapted inbred lines (TZMI101 and TZMI501) from IITA. Tropical mid-altitude maize inbred line at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, northern leaf blight (Exserohilum turcicum), common corn rust (Puccinia sorghi), and maize streak virus, which are prevalent in the mid-altitudes in West and Central Africa. Has a flint grain texture, silks in 69 days, has plant height of 125 cm under artificial Striga infestation.

PI 639945. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI121. GP-448. Pedigree - Extracted from a broad based maize streak virus resistant mid-altitude population, TZMSR, formed from crosses between lowland maize streak virus resistant populations and mid-altitude germplasm from Eastern and Southern Africa as well as other germplasm sources from CIMMYT and the temperate zone. Tropical mid-altitude maize inbred line at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, northern leaf blight (Exserohilum turcicum), common corn rust (Puccinia sorghi), and maize streak virus, which are prevalent in the mid-altitudes in West and Central Africa. Has a semi-dent grain texture, silks in 64 days, has plant height of 113 cm under artificial Striga infestation.

PI 639946. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI122. GP-449. Pedigree - Selected from a cross between two mid-altitude adapted inbred lines (90301, 87036) from IITA. Tropical mid-altitude maize inbred line at the S8 stage of inbreeding; has combined resistance to Striga hermonthica, northern leaf blight

(Exserohilum turcicum), common corn rust (Puccinia sorghi), and maize streak virus, which are prevalent in the mid-altitudes in W. & Central Africa. Has flint grain texture, silks in 68 d; has plant height of 122 cm under artificial Striga infestation.

PI 639947. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI123. GP-450. Pedigree - Selected from a cross between two mid-altitude adapted inbred lines (87036 and 89274) from IITA. Tropical mid-altitude maize inbred line at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, northern leaf blight (Exserohilum turcicum), common corn rust (Puccinia sorghi), and maize streak virus, which are prevalent in the mid-altitudes in West and Central Africa. Has a flint grain texture, silks in 65 days, has plant height of 129 cm under artificial Striga infestation.

PI 639948. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI124. GP-451. Pedigree - Selected from a cross between two mid-altitude adapted inbred lines (87036 and 89274) from IITA. Tropical mid-altitude maize inbred line at the S8 stage of inbreeding and has combined resistance to Striga hermonthica, northern leaf blight (Exserohilum turcicum), common corn rust (Puccinia sorghi), and maize streak virus, which are prevalent in the mid-altitudes in West and Central Africa. Has a flint grain texture, silks in 64 days, has plant height of 139 cm under artificial Striga infestation.

PI 639949. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI125. GP-452. Pedigree - Selected from a cross between a mid-altitude synthetic (SynB) and an inbred line (87036) from IITA. Tropical mid-altitude maize inbred line at the S8 stage of inbreeding; has combined resistance to Striga hermonthica, northern leaf blight (Exserohilum turcicum), common corn rust (Puccinia sorghi), and maize streak virus, which are prevalent in the mid-altitudes in W. & Central Africa. Has a dent grain texture, silks in 63 d, has plant height of 125 cm under artificial Striga infestation.

PI 639950. Zea mays L. **subsp. mays**
Breeding. Inbred. TZSTRI126. GP-453. Pedigree - Selected from a cross between two mid-altitude adapted inbred lines (88091, 90156) from IITA. Tropical mid-altitude maize inbred line at the S8 stage of inbreeding; has combined resistance to Striga hermonthica, northern leaf blight (Exserohilum turcicum), common corn rust (Puccinia sorghi), and maize streak virus, which are prevalent in the mid-altitudes in W.& Central Africa. Has a flint grain texture, silks in 65 d; has plant height of 122 cm under artificial Striga infestation.

The following were developed by Robert S. Zemetra, University of Idaho, Department of Plant, Soil and Entomology, Moscow, Idaho 83843, United States; Katherine O'Brien, University of Idaho, Aberdeen Research & Extension Center, P.O. Box AA, Aberdeen, Idaho 83210, United States; Mary Guttieri, University of Idaho, PO Box 870, 1693 S 2700 W, Aberdeen, Idaho 83210-0530, United States; Edward J. Souza, USDA-ARS, Soft Wheat Quality Laboratory, 1680 Madison Avenue, Wooster, Ohio 44691, United States. Received 09/13/2005.

PI 639951. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "JUNIPER"; A91013W-1; IDO575; NSGC 9537. CV-1021. Pedigree - IDO352/UT165093. Released 2006. Hard red winter wheat. Tall,

awned, bronze-chaff. Resistance to dwarf bunt, stripe rust, and stem rust. Reaction to leaf rust is unknown. Adapated to rain-fed production with good emergence from deep seeding. Tested in the Western Regional Nursery, 2001-2003.

The following were developed by Edward J. Souza, University of Idaho, Aberdeen Research & Extension Center, P.O. Box 870, Aberdeen, Idaho 83210, United States. Received 09/13/2005.

PI 639952. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "UI LOCHSA"; A95634S-B-3; IDO597; NSGC 9538. Pedigree - WPB936/Wilgoyne//Sunstar I. Hard white spring wheat. Lochsa is a semi-dwarf wheat adapted to irrigated production. Moderately resistant to stripe rust. Higher than average grain protein. Tested in the Western Regional Nursery, 2003-2004.

The following were developed by Robert S. Zemetra, University of Idaho, Department of Plant, Soil and Entomology, Moscow, Idaho 83843, United States; Katherine O'Brien, University of Idaho, Aberdeen Research & Extension Center, P.O. Box AA, Aberdeen, Idaho 83210, United States; Mary Guttieri, University of Idaho, PO Box 870, 1693 S 2700 W, Aberdeen, Idaho 83210-0530, United States; Edward J. Souza, USDA-ARS, Soft Wheat Quality Laboratory, 1680 Madison Avenue, Wooster, Ohio 44691, United States. Received 09/13/2005.

PI 639953. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "UI DARWIN"; A93151W-85; IDO604; NSGC 9539. CV-1022. Pedigree - IDO445/Manning. Released 2006. Hard white winter wheat. Tall, white-chaff. Adapted to rain-fed production in southeastern Idaho. Resistant to current races of stripe rust and dwarf bunt. Tolerant to snow mold. Tested in the Western Regional Nursery, 2003-2005.

The following were donated by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg.-N, Lexington, Kentucky 40546-0019, United States. Received 2000.

PI 639954. Trifolium erubescens Fenzl
Uncertain. S-242-1; W6 22234.

The following were donated by Shahal Abbo, Hebrew University of Jerusalem, Field Crops, Vegetables & Genetics, Rehovot, Central 76100, Israel. Received 12/20/2004.

PI 639955. Pisum sativum var. elatius (Steven ex M. Bieb.) Meikle
Wild. Pe31; W6 26375. Collected 12/2004 in Turkey. Collected in the Galilee, near Shtoola village close to the oold ruins of the Arab village of IKRITH, a few KM south of the Israeli-Lebanese border.

PI 639956. Pisum sativum var. elatius (Steven ex M. Bieb.) Meikle
Wild. Pe30; W6 26374. Collected 12/2004 in Turkey. Collected near the hydrometric station on the Hazbani creek (Kibbutz Hagoshrim, Israel).

PI 639957. Pisum sativum var. elatius (Steven ex M. Bieb.) Meikle
Wild. Pe13; W6 26373. Collected 12/2004 in Turkey. Collected in a lentil field about 20 Km west of Diyarbakir (on the way from Siverek), Turkey. Basaltic vertisol.

PI 639958. Pisum sativum var. elatius (Steven ex M. Bieb.) Meikle
Wild. Pe10; W6 26371. Collected 12/2004 in Turkey. Collected on a limestone hill south of the Golbashi-Adiyamen road just before Atmali, Turkey.

PI 639959. Pisum sativum var. elatius (Steven ex M. Bieb.) Meikle
Wild. Pe9; W6 26370. Collected 12/2004 in Turkey. Collected on a limestone hill south of the Golbashi-Adiyamen road just before Atmali, Turkey.

PI 639960. Pisum sativum var. elatius (Steven ex M. Bieb.) Meikle
Wild. Pe6; W6 26369. Collected 12/2004 in Turkey. Collected on the edge of a pistashio grove, about 12 Km along the side road going to Bozova from the main Urfa-Diyarbakir road, Turkey. Limestone-derived terra rosa.

PI 639961. Pisum sativum var. elatius (Steven ex M. Bieb.) Meikle
Wild. Pe1; W6 26365. Collected 12/2004 in Turkey. Latitude 37° 3' N. Longitude 37° 8' E. Collected at the edge of an olive grove near Gaziantop, Turkey. Gray redzina soil.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 06/2003.

PI 639962. Pisum sativum var. arvense (L.) Poir.
Wild. TKM37-327; W6 24570. Collected 06/05/2002 in Turkmenistan. Latitude 38° 31' 10" N. Longitude 56° 23' 29" E. Elevation 934 m.

The following were collected by Miho Mihov, Institute for Wheat and Sunflower, "Dobroudja" 9520, General Toschevo, Tolbukhin 9520, Bulgaria; Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 07/1997.

PI 639963. Pisum sativum subsp. elatius (Steven ex M. Bieb.) Asch. & Graebn.
Wild. B97-71; W6 20047. Collected 06/1997 in Bulgaria. Latitude 43° 21' 43" N. Longitude 28° 27' 46" E. Elevation 46 m. At the Kaliakra Monument along the Black Sea. Open areas near drop off to Black Sea.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 06/30/1995.

PI 639964. Pisum sativum var. arvense (L.) Poir.
Wild. W6 17218. Collected 06/24/1995 in Bulgaria. Elevation 20 m. Collected on the steps leading down from the guest house of the

Institute for Wheat and Sunflowers 'Dobroudja' at Albena to the beach on the Black Sea.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 05/22/1995.

PI 639965. Pisum sativum subsp. transcaucasicum Govorov
Cultivated. W6 17040. Collected 05/15/1995 in Syria. Collected from plot 5 in evaluation trial at ICARDA Center, Tel Hadya.

PI 639966. Pisum sativum subsp. elatius (Steven ex M. Bieb.) Asch. & Graebn.
Wild. WJK94-T11; W6 16220. Collected 05/28/1994 in Turkey. Two immature pods collected.

The following were donated by Norman F. Weeden, Cornell University, New York State Agric. Exp. Station, Department of Horticultural Sciences, Geneva, New York 14456-0462, United States. Received 04/01/1993.

PI 639967. Pisum sativum subsp. asiaticum Govorov
Uncertain. VIR K-7290; W6 15040. Collected in India.

PI 639968. Pisum sativum subsp. asiaticum Govorov
Uncertain. VIR K-7036; W6 15039. Collected in Nepal.

PI 639969. Pisum sativum subsp. asiaticum Govorov
Uncertain. VIR K-5322; W6 15036. Collected in Nepal.

PI 639970. Pisum sativum subsp. transcaucasicum Govorov
Uncertain. VIR K-4871; W6 15035.

PI 639971. Pisum sativum subsp. transcaucasicum Govorov
Uncertain. VIR K-2376; W6 15027.

PI 639972. Pisum sativum subsp. elatius (Steven ex M. Bieb.) Asch. & Graebn.
Uncertain. VIR 4014; W6 15015. Collected in Azerbaijan.

PI 639973. Pisum sativum subsp. elatius (Steven ex M. Bieb.) Asch. & Graebn.
Uncertain. VIR 3115; W6 15011. Collected in Italy.

PI 639974. Pisum sativum subsp. elatius (Steven ex M. Bieb.) Asch. & Graebn.
Uncertain. VIR 2743; 55-373; W6 15009. Collected in Georgia.

PI 639975. Pisum sativum subsp. elatius (Steven ex M. Bieb.) Asch. & Graebn.
Uncertain. VIR 1851; W6 15006. Collected in Georgia.

The following were donated by Institute of Introduction and Plant Genetic Resources, K. Malkov Agric. Exp. Stat., Sadovo, Plovdiv 4122, Bulgaria. Received 03/15/1992.

PI 639976. Pisum sativum var. arvense (L.) Poir.
Cultivar. "P-77"; ISN-504; W6 12738; G 29995.

PI 639977. Pisum sativum var. arvense (L.) Poir.
Cultivar. "P-226"; ISN-503; W6 12737; G 29994.

PI 639978. Pisum sativum var. arvense (L.) Poir.
Cultivar. "KENEJA"; ISN-502; W6 12736; G 29993.

PI 639979. Pisum sativum var. arvense (L.) Poir.
Cultivar. "YUBILEI"; ISN-501; W6 12735; G 29992.

PI 639980. Pisum sativum var. arvense (L.) Poir.
Cultivar. "MIR"; ISN-500; W6 12734; G 29991.

PI 639981. Pisum sativum var. arvense (L.) Poir.
Cultivar. "PLEVEN 10"; ISN-499; W6 12733; G 29990.

The following were donated by Weibullsholm Plant Breeding Institute, Box 520, Landskrona, Malmohus S-261 24, Sweden. Received 03/15/1992.

PI 639982. Pisum sativum subsp. transcaucasicum Govorov
Cultivated. 1448; W6 12704; G 29164. Seed packet says: L K CO. Grusinische SSR.

PI 639983. Pisum sativum subsp. abyssinicum (A. Braun) Govorov
Cultivated. 808; W6 12701; G 29161. Seed packet says: L K CO.

The following were collected by Alan A. Atchley, USDA-ARS, Plant Genetics & Germplasm Institute, Building 001 Room 307A BARC-WEST, Beltsville, Maryland 20705, United States; Calvin R. Sperling, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 402, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States; H.H. Gecit, Ankara University, Ankara, Ankara, Turkey; D. Eser, Ankara University, Ankara, Ankara, Turkey. Donated by University of Ankara, College of Agriculture, Department of Agronomy, Ankara, Ankara, Turkey; Calvin R. Sperling, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 402, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 10/15/1989.

PI 639984. Pisum sativum subsp. elatius (Steven ex M. Bieb.) Asch. & Graebn.
Wild. TU86-01-01; TU-86-01-01; W6 12615; G 28312. Collected 06/29/1986 in Van, Turkey. Latitude 38° 21' N. Longitude 43° 2' E. Elevation 1730 m. Steep S facing slope of loose, rocky soil and abandoned agricultural terraces, Akdamar Island in Lake Van, Van Province. Growing over old terraces and among rocks.

The following were donated by Research Centre for Agrobotany, I.P.P.Q., H-2766 Tapioszele. Received 11/25/1992.

PI 639985. Pisum sativum subsp. elatius (Steven ex M. Bieb.) Asch. & Graebn.
Cultivated. 1898; W6 11125. Collected in Romania.

PI 639986. Pisum sativum subsp. abyssinicum (A. Braun) Govorov
Cultivated. 1897; W6 11124. Collected in Morocco.

The following were donated by N.I. Vavilov Research Institute of Plant Industry, 44, B. Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation. Received 04/1990.

PI 639987. Arachis hypogaea L.
K-489; Grif 258. Collected in China.

PI 639988. Arachis hypogaea L.
K-1251; Grif 270. Collected in Hungary.

The following were donated by Int. Crops Res. Inst. for the Semi-Arid Tropics, Patancheru P.O., Andhra Pradesh 502 324, India. Received 03/03/1990.

PI 639989. Arachis hypogaea L.
ICG 1561; Grif 387.

PI 639990. Arachis hypogaea L.
ICG 1023; Grif 389.

PI 639991. Arachis hypogaea L.
ICG 758; Grif 400.

The following were donated by S. A. Moraes, Instituto Agronomico, S. Microbiologia Fitotecnica, C. Postal 28, Campinas, Sao Paulo 13100, Brazil. Received 12/03/1990.

PI 639992. Arachis hypogaea L.
V Tatui; Grif 940.

The following were donated by D. Morris Porter, USDA, ARS, Peanut Production, Diseases and Harvesting Research Unit, 6321 Holland Road, Suffolk, Virginia 23437, United States. Received 03/03/1994.

PI 639993. Arachis hypogaea L.
"GRANAT"; II-1-302; Grif 12338. Collected in Hungary.

PI 639994. Arachis hypogaea L.
"NR 1717"; II-1-307; Grif 12340. Collected in Hungary.

The following were donated by National Youngnam Agricultural Experiment Station, Industrial Crops Research Laboratory, R.D.A., Milyang, Kyongsang Nam 627-130, Korea, South. Received 10/06/1997.

PI 639995. Arachis hypogaea L.
Breeding. IK8; Grif 13994. Shinpung type.

The following were collected by Jaime Engelmann, I.N.I.A.P., Estacion Experimental 'Santa Catalina', Casilla Postal 17-01-340, Quito, Pichincha, Ecuador; Cesar Tapia, Instituto Nacional Autonomo de Investigaciones Agropecuarias, Departamento Nacional de Recusos Fitogeneticos Y Biotecnolog, Estacion Experimental Sta. Catalina, Santa Catalina, Pichincha, Ecuador. Received 11/29/1999.

PI 639996. Arachis hypogaea L.
Landrace. TE-025; mani rosita; NGRL 331; Grif 14347. Collected 09/28/1999 in Guayas, Ecuador. Latitude 1° 49' 2" S. Longitude 80° 14' 2" W. Elevation 90 m. Canton Pedro Carbo; Localidad Pedro Carbo. Seeds red.

The following were developed by David S. Marshall, Texas A&M University, Research & Extension Center, 17360 Coit Road, Dallas, Texas 75252-6599, United States. Donated by Russell L. Sutton, Texas A&M University, Texas A&M University Res. & Ext. Center, 17360 Coit Road, Dallas, Texas 75252, United States. Received 05/20/2003.

PI 639997. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. OK98756; NSGC 8873. Pedigree - OK87819/OK90824.

PI 639998. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX96D197; CC1PRO-8-12-1-13; NSGC 8875. Pedigree - Bulk selection.

PI 639999. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX99D302; OSU97ST3203-1; NSGC 8878. Pedigree - OK90818/OK91810.

PI 640000. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX99D330; OSU97ST3216-1; NSGC 8879. Pedigree - OK92910/OK92919.

The following were donated by Russell L. Sutton, Texas A&M University, Texas A&M University Res. & Ext. Center, 17360 Coit Road, Dallas, Texas 75252, United States. Received 05/20/2003.

PI 640001. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX99D336; OSU97ST3217-3; NSGC 8880. Developed in United States. Pedigree - OK92912/OK92922.

The following were developed by David S. Marshall, Texas A&M University, Research & Extension Center, 17360 Coit Road, Dallas, Texas 75252-6599, United States. Donated by Russell L. Sutton, Texas A&M University, Texas A&M University Res. & Ext. Center, 17360 Coit Road, Dallas, Texas 75252, United States. Received 05/20/2003.

PI 640002. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX99D341; OSU97ST3217-8; NSGC 8881. Pedigree - OK92912/OK92922.

PI 640003. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX99D433; OSU97ST3246-3; NSGC 8882. Pedigree - Robust/2*M44//OK89711/3/Robust/...

PI 640004. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX99D456; 97ST3252-1 gms; NSGC 8883. Pedigree - Morex/OK88925//M44/Elmira.

PI 640005. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX99D617; 97ST3205-15; NSGC 8885. Pedigree - OK93803/OK92910.

PI 640006. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX99D684; 97ST3213-12 gms; NSGC 8886. Pedigree - Karla/OK90855//OK92910.

PI 640007. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX99D721; OSU97ST3219-5; NSGC 8887. Pedigree - Russell/TX89D8036.

PI 640008. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX99D923; BX90D030-14-80; NSGC 8888. Pedigree - TAMBAR 402 2*/CI 5823.

PI 640009. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX99D926; BX92D007-3; NSGC 8889. Pedigree - Perkins/BX86D013-9.

PI 640010. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX00D525; CC1PRO-8-12-4-41-9; NSGC 8890. Pedigree - Bulk selection.

PI 640011. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX00D527; CC1PRO-8-12-4-41-59; NSGC 8891. Pedigree - Bulk selection.

PI 640012. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX00D533; BX86D008-5-3-6-16; NSGC 8892. Pedigree - Morex/Harrison//Perry/VA73-42-19.

PI 640013. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX00D557; BX93D041-8-3; NSGC 8893. Pedigree - TAMBAR 500/92AB999.

PI 640014. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX00D572; DH54-108-8; NSGC 8894. Pedigree - Colter/TAMBAR 500.

PI 640015. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX00D585; BX90D026-7-4-25-36; NSGC 8895. Pedigree - TAMBAR 500/Clayton//TAMBAR 402.

PI 640016. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX00D631; BX89D044-3-9-1-2; NSGC 8896. Pedigree - TAMBAR 500/Diamond//TX80D826.

PI 640017. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX00D642; BX93D055-3-3; NSGC 8897. Pedigree - Starling/TTCC107.

PI 640018. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D201; 97ST2750-P15; NSGC 8898. Pedigree - M75/Perkins//Stander/OK82805.

PI 640019. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D202; 97ST2750-P29; NSGC 8899. Pedigree - M75/Perkins//Stander/OK82805.

PI 640020. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D204; 97ST2949-P9; NSGC 8900. Pedigree - OK93803/OK92915.

PI 640021. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D206; 97ST2949-P15; NSGC 8901. Pedigree - OK93803/OK92915.

PI 640022. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D208; 97ST2959 gms-P1; NSGC 8902. Pedigree - M81-162/OK87802-5//OK92915.

PI 640023. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D209; 97ST2959 gms-P4; NSGC 8903. Pedigree - M81-162/OK87802-5//OK92915.

PI 640024. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D210; 97ST2959 gms-P13); NSGC 8904. Pedigree - M81-162/OK87802-5//OK92915.

PI 640025. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D211; 97ST2971 gms-P1; NSGC 8905. Pedigree - Hazen/GA82-594//OK92915.

PI 640026. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D212; 97ST2971 gms-P4; NSGC 8906. Pedigree - Hazen/GA82-594//OK92915.

PI 640027. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D213; 97ST2991 gms-P10; NSGC 8907. Pedigree - Robust/Perkins//M46/GA761522.

PI 640028. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D214; 97ST2991 gms-P11; NSGC 8908. Pedigree - Robust/Perkins//M46/GA761522.

PI 640029. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D215; 97ST3012 gms-P17; NSGC 8909. Pedigree - Robust/Excel//TX89D8040.

PI 640030. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D217; 97ST3224-1-8; NSGC 8911. Pedigree - ND5570/G144-8.

PI 640031. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D218; 97ST3224-1-9; NSGC 8912. Pedigree - ND5570/G144-8.

The following were donated by Russell L. Sutton, Texas A&M University, Texas A&M University Res. & Ext. Center, 17360 Coit Road, Dallas, Texas 75252, United States. Received 05/20/2003.

PI 640032. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D220; 97ST3249-2 gms-P12; NSGC 8914. Developed in United States. Pedigree - 6B80-761/OK88907//M46/86AB474.

The following were developed by David S. Marshall, Texas A&M University, Research & Extension Center, 17360 Coit Road, Dallas, Texas 75252-6599, United States. Donated by Russell L. Sutton, Texas A&M University, Texas A&M University Res. & Ext. Center, 17360 Coit Road, Dallas, Texas 75252, United States. Received 05/20/2003.

PI 640033. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D221; 978STGH633-2; NSGC 8915. Pedigree - MOB3568/OK88934.

PI 640034. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D222; 97ST3205-12-10; NSGC 8916. Pedigree - OK93803/OK92910.

PI 640035. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D224; 97ST3217-3 gms-11; NSGC 8917. Pedigree - Hazen/TX89D8036.

PI 640036. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D225; 97ST3217-3 gms-16; NSGC 8918. Pedigree - Hazen/TX89D8036.

PI 640037. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D226; 97ST3217-3 gms-20; NSGC 8919. Pedigree - Hazen/TX89D8036.

PI 640038. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D227; PA9550-157-P5; NSGC 8920. Pedigree - VA84-42-32/Pennco.

PI 640039. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D228; PA9550-157-P6; NSGC 8921. Pedigree - VA84-42-32/Pennco.

PI 640040. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D229; PA9550-157-P11; NSGC 8922. Pedigree - VA84-42-32/Pennco.

PI 640041. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D231; PA9550-157-P29; NSGC 8923. Pedigree - VA84-42-32/Pennco.

PI 640042. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D232; SC880248-P6; NSGC 8924. Pedigree - VA72-42-45/SC793556/CI 2457.

PI 640043. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D235; SC880248-P36; NSGC 8927. Pedigree - VA72-42-45/SC793556/CI 2457.

PI 640044. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D238; SC880248-P51; NSGC 8930. Pedigree - VA72-42-45/SC793556/CI 2457.

PI 640045. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D240; BX86D002-2-1-5-35-14; NSGC 8932. Pedigree - Post/CI 1243//Defra.

PI 640046. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D241; BX86D002-2-1-5-35-18; NSGC 8933. Pedigree - Post/CI 1243//Defra.

PI 640047. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D242; BX86D002-2-1-5-35-44; NSGC 8934. Pedigree - Post/CI 1243//Defra.

PI 640048. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D244; CC1PRO-8-12-4-27-11-26; NSGC 8935. Pedigree - Bulk selection.

PI 640049. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D245; CC1PRO-8-12-4-27-11-28; NSGC 8936. Pedigree - Bulk selection.

PI 640050. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D246; CC1PRO-8-12-4-27-11-35; NSGC 8937. Pedigree - Bulk selection.

PI 640051. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D248; CC1PRO-8-12-4-41-37-13; NSGC 8938. Pedigree - Bulk selection.

PI 640052. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D249; CC1PRO-8-12-4-41-37-26; NSGC 8939. Pedigree - Bulk selection.

PI 640053. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D250; CC1PRO-8-12-26-55-8-2; NSGC 8940. Pedigree - Bulk selection.

PI 640054. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D251; CC1PRO-8-12-26-55-8-6; NSGC 8941. Pedigree - Bulk selection.

PI 640055. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D252; CC1PRO-8-12-26-55-8-17; NSGC 8942. Pedigree - Bulk selection.

PI 640056. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D253; CC1PRO-8-12-26-55-8-26; NSGC 8943. Pedigree - Bulk selection.

PI 640057. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D255; CC1PRO-8-12-26-55-8-48; NSGC 8944. Pedigree - Bulk selection.

The following were donated by Russell L. Sutton, Texas A&M University, Texas A&M University Res. & Ext. Center, 17360 Coit Road, Dallas, Texas 75252, United States. Received 05/20/2003.

PI 640058. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D257; CC1PRO-8-12-26-55-33-14; NSGC 8945. Developed in United States. Pedigree - Bulk selection.

The following were developed by David S. Marshall, Texas A&M University, Research & Extension Center, 17360 Coit Road, Dallas, Texas 75252-6599, United States. Donated by Russell L. Sutton, Texas A&M University, Texas A&M University Res. & Ext. Center, 17360 Coit Road, Dallas, Texas 75252, United States. Received 05/20/2003.

PI 640059. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D258; CC1PRO-8-12-26-55-33-24; NSGC 8946. Pedigree - Bulk selection.

PI 640060. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D259; CC1PRO-8-12-26-55-45-17; NSGC 8947. Pedigree - Bulk selection.

PI 640061. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D260; CC1PRO-8-12-26-55-45-22; NSGC 8948. Pedigree - Bulk selection.

PI 640062. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D261; CC1PRO-8-12-26-55-54-13; NSGC 8949. Pedigree - Bulk selection.

PI 640063. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D262; CC1PRO-8-12-26-55-54-19; NSGC 8950. Pedigree - Bulk selection.

PI 640064. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D265; CC1PRO-8-12-26-55-54-51; NSGC 8951. Pedigree - Bulk selection.

PI 640065. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D266; CC1PRO-8-12-26-55-63-32; NSGC 8952. Pedigree - Bulk selection.

PI 640066. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D268; 92AB999-D153-8-9; NSGC 8953. Pedigree - Scio/79AB10719.

PI 640067. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D269; 92AB999-D153-8-23; NSGC 8954. Pedigree - Scio/79AB10719.

PI 640068. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D270; 92AB999-D153-8-29; NSGC 8955. Pedigree - Scio/79AB10719.

PI 640069. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D271; 92AB999-D153-8-34; NSGC 8956. Pedigree - Scio/79AB10719.

PI 640070. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D273; 92AB999-D153-8-43; NSGC 8957. Pedigree - Scio/79AB10719.

PI 640071. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D277; DH6-11-36-21; NSGC 8958. Pedigree - Colter/TAMBAR 500.

PI 640072. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D278; DH6-11-36-23; NSGC 8959. Pedigree - Colter/TAMBAR 500.

PI 640073. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D279; DH13-25-35-19; NSGC 8960. Pedigree - Colter/TAMBAR 500.

PI 640074. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D280; DH13-25-35-34; NSGC 8961. Pedigree - Colter/TAMBAR 500.

PI 640075. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D281; DH54-108-21-7; NSGC 8962. Pedigree - Colter/TAMBAR 500.

PI 640076. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D282; DH54-108-21-14; NSGC 8963. Pedigree - Colter/TAMBAR 500.

PI 640077. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D283; DH54-108-21-22; NSGC 8964. Pedigree - Colter/TAMBAR 500.

PI 640078. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D284; DH54-108-21-35; NSGC 8965. Pedigree - Colter/TAMBAR 500.

PI 640079. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D285; DH54-108-21-47; NSGC 8966. Pedigree - Colter/TAMBAR 500.

PI 640080. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D286; BX90D026-7-4-3-46-5; NSGC 8967. Pedigree - TAMBAR 500/Clayton//TAMBAR 402.

PI 640081. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D288; BX90D026-7-4-3-61-20; NSGC 8968. Pedigree - TAMBAR 500/Clayton//TAMBAR 402.

PI 640082. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D289; BX90D026-7-4-3-61-49; NSGC 8969. Pedigree - TAMBAR 500/Clayton//TAMBAR 402.

PI 640083. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D290; SC890585-D19-104-15; NSGC 8970. Pedigree - VA72-42-45/SC793556/CI2457.

PI 640084. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D291; BX90D030-14-6-25; NSGC 8971. Pedigree - TAMBAR 402 2*/CI 5823.

PI 640085. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D293; BX90D026-1-9-35-71-47-9; NSGC 8972. Pedigree - TAMBAR 500/Clayton//TAMBAR 402.

PI 640086. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D295; BX90D026-1-9-35-71-47-49; NSGC 8973. Pedigree - TAMBAR 500/Clayton//TAMBAR 402.

PI 640087. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D296; BX90D026-1-9-35-71-47-59; NSGC 8974. Pedigree - TAMBAR 500/Clayton//TAMBAR 402.

PI 640088. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D297; BX90D017-7-37-38-12-6; NSGC 8975. Pedigree - Sussex/TAMBAR 500//TAMBAR 402.

PI 640089. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D298; BX90D017-7-37-38-12-13; NSGC 8976. Pedigree - Sussex/TAMBAR 500//TAMBAR 402.

PI 640090. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D301; BX90D017-7-37-38-12-40; NSGC 8977. Pedigree - Sussex/TAMBAR 500//TAMBAR 402.

PI 640091. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D304; TTCC291-D1-6; NSGC 8979. Pedigree - H. vulgare 2R; Isparta, Golbasi.

PI 640092. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D306; CMSWB88A-420-D8-1-2-18; NSGC 8980. Pedigree - Ogra/Capul"S".

PI 640093. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D308; CMSWB88A-441-D38-3-3-9; NSGC 8981. Pedigree - Melusine/3/MARI/COHO//Row134.73.

PI 640094. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D309; CMSWB88A-441-D38-3-3-21; NSGC 8982. Pedigree - Melusine/3/MARI/COHO//Row134.73.

PI 640095. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D310; 97ST2772-13; NSGC 8983. Pedigree - Robust/NE86594.

PI 640096. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D313; 97ST2786-30; NSGC 8985. Pedigree - B2601/VA93-42-48.

PI 640097. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D315; 97ST2867-11 gms; NSGC 8986. Pedigree - Russell/Perkins//Plaisant.

PI 640098. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D316; 97ST2890-4 gms; NSGC 8987. Pedigree - Robust/TAMBAR 500//OK91806.

PI 640099. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D318; 97ST2929-2 gms; NSGC 8988. Pedigree - Robust/WA2531-81.

PI 640100. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D321; 97ST2954-14 gms; NSGC 8989. Pedigree - M44/VA84-44-342//OK87807.

PI 640101. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D323; 97ST2954-30 gms; NSGC 8990. Pedigree - M44/VA84-44-342//OK87807.

PI 640102. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D324; 97ST2954-40 gms; NSGC 8991. Pedigree - M44/VA84-44-342//OK87807.

PI 640103. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D326; 97STGH804-12; NSGC 8992. Pedigree - OK92910/OK96851.

PI 640104. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D328; 97STGH804-48; NSGC 8993. Pedigree - OK92910/OK96851.

PI 640105. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D331; 97STGH856-10; NSGC 8994. Pedigree - 87AB9478/WA1997-87//91AB7655/VA92-42-52.

PI 640106. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D333; 97STGH860-33; NSGC 8995. Pedigree - Stander/SC890202.

PI 640107. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D335; 97STGH861-2; NSGC 8996. Pedigree - Stander/Wysor.

PI 640108. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D336; 97STGH861-26; NSGC 8997. Pedigree - Stander/Wysor.

PI 640109. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D338; 97STGH864-20; NSGC 8998. Pedigree - M75/SC890202.

PI 640110. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D341; 97STGH870-24; NSGC 8999. Pedigree - B1614/SC890202.

PI 640111. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D343; 97STGH870-49; NSGC 9000. Pedigree - B1614/SC890202.

PI 640112. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D345; CC1PRO-8-12-1-13; NSGC 9001. Pedigree - Bulk selection.

PI 640113. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX02D346; CC1PRO-8-12-1-13; NSGC 9002. Pedigree - Bulk selection.

PI 640114. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D105; BX90D030-14-80-27-1; NSGC 9003. Pedigree - TAMBAR 402 2*/CI 5823.

PI 640115. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D106; NSGC 9004. Pedigree - TAMBAR 500/Colter bulk DH population -7.

PI 640116. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D107; NSGC 9005. Pedigree - TAMBAR 500/Colter bulk DH population -26.

PI 640117. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D108; NSGC 9006. Pedigree - 92AZBED0111 'S' CC43D/Stripe rust resistant lines.

PI 640118. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D109; 97ST2625-P-4; NSGC 9007. Pedigree - OK95939/OK92911.

PI 640119. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D110; 97ST2625-P-8; NSGC 9008. Pedigree - OK95939/OK92911.

PI 640120. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D111; 97ST2625-P-28; NSGC 9009. Pedigree - OK95939/OK92911.

PI 640121. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D113; 97ST2636-P-6 gms; NSGC 9011. Pedigree - Hazen/TX89D8036//OK94833.

PI 640122. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D114; 97ST2636-P-21 gms; NSGC 9012. Pedigree - Hazen/TX89D8036//OK94833.

PI 640123. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D115; 97ST2661-P-25 gms; NSGC 9013. Pedigree - Robust/X1//TX89D8040/3/Stander/OK82805.

PI 640124. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D116; 97ST2717-P-10 gms; NSGC 9014. Pedigree - 6B80/TX89D8042//88Y281/OK82827.

PI 640125. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D117; 97ST2735-P-2; NSGC 9015. Pedigree - ND11055/OK82805//88Y98/WA2531-81.

PI 640126. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D118; 97ST2735-P-14; NSGC 9016. Pedigree - ND11055/OK82805//88Y98/WA2531-81.

PI 640127. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D119; 97ST2735-P-22; NSGC 9017. Pedigree - ND11055/OK82805//88Y98/WA2531-81.

PI 640128. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D120; 97ST2735-P-26; NSGC 9018. Pedigree - ND11055/OK82805//88Y98/WA2531-81.

PI 640129. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D121; 97ST2768-P-10; NSGC 9019. Pedigree - Colter/NE86594.

PI 640130. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D122; 97ST2768-P-16; NSGC 9020. Pedigree - Colter/NE86594.

PI 640131. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D123; 97ST2768-P-26; NSGC 9021. Pedigree - Colter/NE86594.

PI 640132. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D124; 97ST2769-P-2; NSGC 9022. Pedigree - Morex/WA1997-87.

PI 640133. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D125; 97ST2769-P-24; NSGC 9023. Pedigree - Morex/WA1997-87.

PI 640134. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D126; 97ST2786-P-19; NSGC 9024. Pedigree - B2601/VA93-42-48.

PI 640135. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D127; 97ST2808-P-10; NSGC 9025. Pedigree - 91AB7655/VA92-42-52.

PI 640136. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D128; 97ST2808-P-17; NSGC 9026. Pedigree - 91AB7655/VA92-42-52.

PI 640137. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D129; 97ST2867-P-5 gms; NSGC 9027. Pedigree - Russell/Perkins//Plaisant.

PI 640138. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D130; 97ST2867-P-18 gms; NSGC 9028. Pedigree - Russell/Perkins//Plaisant.

PI 640139. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D132; 97ST2889-P-41 gms; NSGC 9030. Pedigree - Robust/TAMBAR 500//OK90813.

PI 640140. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D133; 97ST2889-P-46 gms; NSGC 9031. Pedigree - Robust/TAMBAR 500//OK90813.

PI 640141. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D134; 97ST2889-P-54 gms; NSGC 9032. Pedigree - Robust/TAMBAR 500//OK90813.

PI 640142. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D135; 97ST2902-P-14; NSGC 9033. Pedigree - ND11116/OK84817.

PI 640143. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D137; 97ST2909-P-12; NSGC 9035. Pedigree - M75/Perkins.

PI 640144. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D138; 97ST2909-P-13; NSGC 9036. Pedigree - M75/Perkins.

PI 640145. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D139; 97ST2954-P-3 gms; NSGC 9037. Pedigree - M44/VA84-44-342//OK87807.

PI 640146. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D140; 97ST2954-P-13 gms; NSGC 9038. Pedigree - M44/VA84-44-342//OK87807.

PI 640147. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D141; 97ST2954-P-20 gms; NSGC 9039. Pedigree - M44/VA84-44-342//OK87807.

PI 640148. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D142; 97ST2954-P-21 gms; NSGC 9040. Pedigree - M44/VA84-44-342//OK87807.

PI 640149. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D143; 97ST2954-P-23 gms; NSGC 9041. Pedigree - M44/VA84-44-342//OK87807.

PI 640150. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D144; 97ST2954-P-29 gms; NSGC 9042. Pedigree - M44/VA84-44-342//OK87807.

PI 640151. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D145; 97ST3012-P-11 gms; NSGC 9043. Pedigree - Robust/Excel//TX89D8040.

PI 640152. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D146; 97ST3012-P-26 gms; NSGC 9044. Pedigree - Robust/Excel//TX89D8040.

PI 640153. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D147; 97ST3012-P-31 gms; NSGC 9045. Pedigree - Robust/Excel//TX89D8040.

PI 640154. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D148; 97ST3012-P-42 gms; NSGC 9046. Pedigree - Robust/Excel//TX89D8040.

PI 640155. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D149; 97ST3012-P-44 gms; NSGC 9047. Pedigree - Robust/Excel//TX89D8040.

PI 640156. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D150; 97ST3012-P-50 gms; NSGC 9048. Pedigree - Robust/Excel//TX89D8040.

PI 640157. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D151; 97ST3248-6-P-11 gms; NSGC 9049. Pedigree - Morex/OK87819//M81-162/Elmira.

PI 640158. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D152; 97ST3248-6-P-17 gms; NSGC 9050. Pedigree - Morex/OK87819//M81-162/Elmira.

PI 640159. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D153; 97ST3248-6-P-39 gms; NSGC 9051. Pedigree - Morex/OK87819//M81-162/Elmira.

PI 640160. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D154; 97STGH501-P-8; NSGC 9052. Pedigree - Gray JD339/M81-162.

PI 640161. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D155; 97ST3204-7-P-39; NSGC 9053. Pedigree - OK92910/OK87819.

PI 640162. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D156; 97ST3213-1-P-14 gms; NSGC 9054. Pedigree - Karla/OK90855//OK92910.

PI 640163. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D157; 97ST3213-1-P-19 gms; NSGC 9055. Pedigree - Karla/OK90855//OK92910.

PI 640164. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D158; 97ST3214-4-P-8 gms; NSGC 9056. Pedigree - M44/TX89D8040.

PI 640165. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D159; 97STGH801-P-10; NSGC 9057. Pedigree - OK92910/OK94842.

PI 640166. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D160; 97STGH803-P-18; NSGC 9058. Pedigree - OK92910/OK91806.

PI 640167. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D161; 97STGH803-P-35; NSGC 9059. Pedigree - OK92910/OK91806.

PI 640168. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D162; 97STGH804-P-23; NSGC 9060. Pedigree - OK92910/OK96851.

PI 640169. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D163; 97STGH804-P-36; NSGC 9061. Pedigree - OK92910/OK96851.

PI 640170. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D164; 97STGH804-P-47; NSGC 9062. Pedigree - OK92910/OK96851.

PI 640171. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D165; 97STGH816-P-32; NSGC 9063. Pedigree - OK95929/OK94842.

PI 640172. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D166; 97STGH816-P-51; NSGC 9064. Pedigree - OK95929/OK94842.

PI 640173. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D167; 97STGH817-P-39; NSGC 9065. Pedigree - OK95929/OK95909.

PI 640174. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D168; 97STGH818-P-14; NSGC 9066. Pedigree - OK95929/OK91806.

PI 640175. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D169; 97STGH819-P-24; NSGC 9067. Pedigree - OK95929/OK96855.

PI 640176. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D170; 97STGH820-P-9; NSGC 9068. Pedigree - OK95929/OK96873.

PI 640177. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D171; 97STGH820-P-13; NSGC 9069. Pedigree - OK95929/OK96873.

PI 640178. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D172; 97STGH820-P-21; NSGC 9070. Pedigree - OK95929/OK96873.

PI 640179. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D173; 97STGH820-P-24; NSGC 9071. Pedigree - OK95929/OK96873.

PI 640180. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D174; 97STGH820-P-29; NSGC 9072. Pedigree - OK95929/OK96873.

PI 640181. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D175; 97STGH821-P-58; NSGC 9073. Pedigree - OK96851/OK95920.

PI 640182. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D176; 97STGH825-P-4; NSGC 9074. Pedigree - OK96855/OK96851.

PI 640183. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D177; 97STGH825-P-27; NSGC 9075. Pedigree - OK96855/OK96851.

PI 640184. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D178; 97STGH825-P-33; NSGC 9076. Pedigree - OK96855/OK96851.

PI 640185. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D179; 97STGH825-P-38; NSGC 9077. Pedigree - OK96855/OK96851.

PI 640186. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D180; 97STGH825-P-45; NSGC 9078. Pedigree - OK96855/OK96851.

PI 640187. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D181; 97STGH826-P-4; NSGC 9079. Pedigree - OK96855/OK96856.

PI 640188. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D182; 97STGH826-P-32; NSGC 9080. Pedigree - OK96855/OK96856.

PI 640189. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D183; 97STGH826-P-33; NSGC 9081. Pedigree - OK96855/OK96856.

PI 640190. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D184; 97STGH827-P-29; NSGC 9082. Pedigree - OK96856/OK92911.

PI 640191. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D185; 97STGH828-P-28; NSGC 9083. Pedigree - OK96856/OK94842.

PI 640192. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D187; 97STGH831-P-3; NSGC 9085. Pedigree - OK96856/OK96871.

PI 640193. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D188; 97STGH832-P-30; NSGC 9086. Pedigree - OK96871/OK94842.

PI 640194. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D189; 97STGH835-P-37; NSGC 9087. Pedigree - Russell/WA1997-87//84AB374/VA92-42-23.

PI 640195. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D190; 97STGH835-P-40; NSGC 9088. Pedigree - Russell/WA1997-87//84AB374/VA92-42-23.

PI 640196. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D191; 97STGH835-P-45; NSGC 9089. Pedigree - Russell/WA1997-87//84AB374/VA92-42-23.

PI 640197. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D192; 97STGH837-P-7; NSGC 9090. Pedigree - B1614/VA92-42-52//B1614/WA1997-87.

PI 640198. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D193; 97STGH837-P-31; NSGC 9091. Pedigree - B1614/VA92-42-52//B1614/WA1997-87.

PI 640199. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D194; 97STGH837-P-35; NSGC 9092. Pedigree - B1614/VA92-42-52//B1614/WA1997-87.

PI 640200. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D195; 97STGH837-P-44; NSGC 9093. Pedigree - B1614/VA92-42-52//B1614/WA1997-87.

PI 640201. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D196; 97STGH837-P-52; NSGC 9094. Pedigree - B1614/VA92-42-52//B1614/WA1997-87.

PI 640202. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D197; 97STGH838-P-2; NSGC 9095. Pedigree - B2601/VA92-42-48//Morex/WA1997-87.

PI 640203. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D198; 97STGH838-P-4; NSGC 9096. Pedigree - B2601/VA92-42-48//Morex/WA1997-87.

PI 640204. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D199; 97STGH838-P-10; NSGC 9097. Pedigree - B2601/VA92-42-48//Morex/WA1997-87.

PI 640205. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D200; 97STGH838-P-14; NSGC 9098. Pedigree - B2601/VA92-42-48//Morex/WA1997-87.

PI 640206. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D201; 97STGH838-P-19; NSGC 9099. Pedigree - B2601/VA92-42-48//Morex/WA1997-87.

PI 640207. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D202; 97STGH838-P-23; NSGC 9100. Pedigree - B2601/VA92-42-48//Morex/WA1997-87.

PI 640208. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D203; 97STGH838-P-34; NSGC 9101. Pedigree - B2601/VA92-42-48//Morex/WA1997-87.

PI 640209. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D204; 97STGH838-P-38; NSGC 9102. Pedigree - B2601/VA92-42-48//Morex/WA1997-87.

PI 640210. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D205; 97STGH838-P-43; NSGC 9103. Pedigree - B2601/VA92-42-48//Morex/WA1997-87.

PI 640211. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D206; 97STGH838-P-47; NSGC 9104. Pedigree - B2601/VA92-42-48//Morex/WA1997-87.

PI 640212. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D207; 97DTGH839-P-5; NSGC 9105. Pedigree - B2601/VA92-42-48//Robust/Gwen.

PI 640213. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D208; 97DTGH839-P-43; NSGC 9106. Pedigree - B2601/VA92-42-48//Robust/Gwen.

PI 640214. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D209; 97STGH842-P-34; NSGC 9107. Pedigree - Robust/Gwen//M73/Post 90.

PI 640215. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D210; 97STGH845-P-44; NSGC 9108. Pedigree - ND11055/WA1997-87//B1614/WA1997-87.

PI 640216. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D211; 97STGH846-P-20; NSGC 9109. Pedigree - ND11055/WA1997-87//W10489-86/SDM208-B.

PI 640217. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D212; 97STGH848-P-14; NSGC 9110. Pedigree - B1614/WA1997-87//Excel/Gwen.

PI 640218. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D213; 97STGH849-P-44; NSGC 9111. Pedigree - B1614/WA1997-87//W10489-86/SDM208-B.

PI 640219. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D214; 97STGH851-P-9; NSGC 9112. Pedigree - W10489-86/SDM208-B//91AB7655/VA92...

PI 640220. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D215; 97STGH852-P-24; NSGC 9113. Pedigree - 84AB374/WA1997-87//86AB599/SDM208-B.

PI 640221. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D216; 97STGH852-P-35; NSGC 9114. Pedigree - 84AB374/WA1997-87//86AB599/SDM208-B.

PI 640222. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D217; 97STGH853-P-11; NSGC 9115. Pedigree - 87AB9478/WA1997-87//B1614/WA1997-87.

PI 640223. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D218; 97STGH853-P-25; NSGC 9116. Pedigree - 87AB9478/WA1997-87//B1614/WA1997-87.

PI 640224. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D219; 97STGH853-P-36; NSGC 9117. Pedigree - 87AB9478/WA1997-87//B1614/WA1997-87.

PI 640225. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D220; 97STGH854-P-44; NSGC 9118. Pedigree - 87AB9478/WA1997-87//W10489-86/SDM208-B.

PI 640226. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D222; 97STGH857-P-41; NSGC 9120. Pedigree - Stander/92AB561.

PI 640227. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D223; 97STGH858-P-28; NSGC 9121. Pedigree - Stander/NE92711.

PI 640228. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D224; 97STGH861-P-6; NSGC 9122. Pedigree - Stander/Wysor.

PI 640229. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D225; 97STGH861-P-41; NSGC 9123. Pedigree - Stander/Wysor.

PI 640230. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D226; 97STGH860-P-32; NSGC 9124. Pedigree - Stander/SC890202.

PI 640231. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D227; 97STGH860-P-38; NSGC 9125. Pedigree - Stander/SC890202.

PI 640232. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D228; 97STGH862-P-20; NSGC 9126. Pedigree - M75/92AB561.

PI 640233. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D229; 97STGH864-P-7; NSGC 9127. Pedigree - M75/SC890202.

PI 640234. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D230; 97STGH864-P-42; NSGC 9128. Pedigree - M75/SC890202.

PI 640235. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D231; 97STGH864-P-44; NSGC 9129. Pedigree - M75/SC890202.

PI 640236. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D232; 97STGH865-P-32; NSGC 9130. Pedigree - M75/VA92-42-6.

PI 640237. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D233; 97STGH867-P-2; NSGC 9131. Pedigree - B1614/92AB561.

PI 640238. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D234; 97STGH867-P-18; NSGC 9132. Pedigree - B1614/92AB561.

PI 640239. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D235; 97STGH867-P-20; NSGC 9133. Pedigree - B1614/92AB561.

PI 640240. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D237; 97STGH868-P-6; NSGC 9135. Pedigree - B1614/NE92711.

PI 640241. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D238; 97STGH868-P-10; NSGC 9136. Pedigree - B1614/NE92711.

PI 640242. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D239; 97STGH868-P-30; NSGC 9137. Pedigree - B1614/NE92711.

PI 640243. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D240; 97STGH868-P-42; NSGC 9138. Pedigree - B1614/NE92711.

PI 640244. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D241; 97STGH868-P-43; NSGC 9139. Pedigree - B1614/NE92711.

PI 640245. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D242; 97STGH868-P-45; NSGC 9140. Pedigree - B1614/NE92711.

PI 640246. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D243; 97STGH870-P-27; NSGC 9141. Pedigree - B1614/SC890202.

PI 640247. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D244; 97STGH870-P-35; NSGC 9142. Pedigree - B1614/SC890202.

PI 640248. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D245; 97STGH872-P-27; NSGC 9143. Pedigree - B2601/92AB561.

PI 640249. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D246; 97STGH872-P-31; NSGC 9144. Pedigree - B2601/92AB561.

PI 640250. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D247; 97STGH872-P-33; NSGC 9145. Pedigree - B2601/92AB561.

PI 640251. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D248; 97STGH874-P-1; NSGC 9146. Pedigree - B2601/SC890202.

PI 640252. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D249; 97STGH874-P-13; NSGC 9147. Pedigree - B2601/SC890202.

PI 640253. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D250; 97STGH874-P-25; NSGC 9148. Pedigree - B2601/SC890202.

PI 640254. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D251; 97STGH874-P-47; NSGC 9149. Pedigree - B2601/SC890202.

PI 640255. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D252; 97STGH878-P-13; NSGC 9150. Pedigree - W10489-86/92AB561.

PI 640256. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D253; 97STGH879-P-16; NSGC 9151. Pedigree - W10489-86/ORW-6.

PI 640257. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D254; 97STGH881-P-11; NSGC 9152. Pedigree - ND10981/Wysor.

PI 640258. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D255; 97STGH882-P-12; NSGC 9153. Pedigree - ND11055/92AB561.

PI 640259. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D256; 97STGH882-P-32; NSGC 9154. Pedigree - ND11055/92AB561.

PI 640260. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D257; 97STGH884-P-24; NSGC 9155. Pedigree - ND11055/Post 90.

PI 640261. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D258; 97STGH885-P-6; NSGC 9156. Pedigree - ND11055/SC890202.

PI 640262. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D259; 97STGH885-P-25; NSGC 9157. Pedigree - ND11055/SC890202.

PI 640263. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D260; 97STGH885-P-26; NSGC 9158. Pedigree - ND11055/SC890202.

PI 640264. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D261; 97STGH885-P-29; NSGC 9159. Pedigree - ND11055/SC890202.

PI 640265. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D262; 97STGH885-P-30; NSGC 9160. Pedigree - ND11055/SC890202.

PI 640266. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D263; 97STGH885-P-31; NSGC 9161. Pedigree - ND11055/SC890202.

PI 640267. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D264; 97STGH885-P-35; NSGC 9162. Pedigree - ND11055/SC890202.

PI 640268. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D265; 97STGH885-P-51; NSGC 9163. Pedigree - ND11055/SC890202.

PI 640269. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D266; 97STGH886-P-2; NSGC 9164. Pedigree - 97AB9478/92AB561.

PI 640270. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D267; 97STGH886-P-29; NSGC 9165. Pedigree - 97AB9478/92AB561.

PI 640271. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D268; 97STGH887-P-5; NSGC 9166. Pedigree - 97AB9478/NE92711.

PI 640272. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D269; 97STGH887-P-16; NSGC 9167. Pedigree - 97AB9478/NE92711.

PI 640273. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D270; 97STGH887-P-33; NSGC 9168. Pedigree - 97AB9478/NE92711.

PI 640274. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D271; 97STGH889-P-31; NSGC 9169. Pedigree - 97AB9478/Post 90.

PI 640275. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D272; 97STGH895-P-3 gms; NSGC 9170. Pedigree - ND5570/ND10981//SC890202.

PI 640276. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D273; 97STGH895-P-11 gms; NSGC 9171. Pedigree - ND5570/ND10981//SC890202.

PI 640277. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D274; 97STGH895-P-17 gms; NSGC 9172. Pedigree - ND5570/ND10981//SC890202.

PI 640278. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D275; 97STGH895-P-30 gms; NSGC 9173. Pedigree - ND5570/ND10981//SC890202.

PI 640279. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D276; 97STGH896-P-38 gms; NSGC 9174. Pedigree - ND5570/ND12201//92AB561.

PI 640280. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D277; 97STGH899-P-37 gms; NSGC 9175. Pedigree - Morex/ND11055//88AB124.

PI 640281. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D278; 97STGH900-P-4 gms; NSGC 9176. Pedigree - Morex/ND11055//92AB561.

PI 640282. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D279; 97STGH900-P-33 gms; NSGC 9177. Pedigree - Morex/ND11055//92AB561.

PI 640283. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D280; 97STGH902-P-5 gms; NSGC 9178. Pedigree - Morex/ND11055//NE92711.

PI 640284. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D281; 97STGH905-P-43 gms; NSGC 9179. Pedigree - Morex/B2601//92AB561.

PI 640285. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D282; 97STGH905-P-44 gms; NSGC 9180. Pedigree - Morex/B2601//92AB561.

PI 640286. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D283; 97STGH905-P-7 gms; NSGC 9181. Pedigree - Morex/B2601//92AB561.

PI 640287. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D284; 97STGH905-P-9 gms; NSGC 9182. Pedigree - Morex/B2601//92AB561.

PI 640288. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D285; 97STGH905-P-10 gms; NSGC 9183. Pedigree - Morex/B2601//92AB561.

PI 640289. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D286; 97STGH906-P-35 gms; NSGC 9184. Pedigree - Morex/B2601//SC890202.

PI 640290. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D287; 97STGH907-P-1 gms; NSGC 9185. Pedigree - Morex/B2601//VA92-42-6.

PI 640291. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D288; 97STGH913-P-13 gms; NSGC 9186. Pedigree - Russell/88Y98//Wysor.

PI 640292. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D289; 97STGH916-P-6; NSGC 9187. Pedigree - Robust/WA10489-86//92AB561.

PI 640293. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D290; 97STGH916-P-24; NSGC 9188. Pedigree - Robust/WA10489-86//92AB561.

PI 640294. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D291; 97STGH917-P-5; NSGC 9189. Pedigree - Robust/WA10489-86//NE92711.

PI 640295. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D292; 97STGH917-P-6; NSGC 9190. Pedigree - Robust/WA10489-86//NE92711.

PI 640296. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D293; 97STGH917-P-17; NSGC 9191. Pedigree - Robust/WA10489-86//NE92711.

PI 640297. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D294; 97STGH917-P-25; NSGC 9192. Pedigree - Robust/WA10489-86//NE92711.

PI 640298. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D295; 97STGH917-P-37; NSGC 9193. Pedigree - Robust/WA10489-86//NE92711.

PI 640299. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D296; 97STGH920-P-32; NSGC 9194. Pedigree - Robust/WA10489-86//VA92-42-6.

PI 640300. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D297; 97STGH922-P-27; NSGC 9195. Pedigree - Robust/91AB7655//NE92711.

PI 640301. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D298; 98G801-P-12; NSGC 9196. Pedigree - OK91825/OK95946.

PI 640302. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D299; 98G802-P-42; NSGC 9197. Pedigree - OK94848/OK91806.

PI 640303. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D300; 98G804-P-43; NSGC 9198. Pedigree - OK94848/OK96858.

PI 640304. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D301; 98G805-P-10; NSGC 9199. Pedigree - OK95910/OK96851.

PI 640305. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D302; 98G805-P-14; NSGC 9200. Pedigree - OK95910/OK96851.

PI 640306. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D303; 98G808-P-29; NSGC 9201. Pedigree - OK96858/OK91806.

PI 640307. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D304; 98G809-P-1; NSGC 9202. Pedigree - OK96858/OK94848.

PI 640308. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D305; 98G809-P-6; NSGC 9203. Pedigree - OK96858/OK94848.

PI 640309. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D306; 98G809-P-10; NSGC 9204. Pedigree - OK96858/OK94848.

PI 640310. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D307; 98G809-P-15; NSGC 9205. Pedigree - OK96858/OK94848.

PI 640311. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D308; 98G810-P-10; NSGC 9206. Pedigree - OK96858/OK96974.

PI 640312. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D309; 98G812-P-32; NSGC 9207. Pedigree - OK96874/OK96887.

PI 640313. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D310; 98G813-P-34 gms; NSGC 9208. Pedigree - M44/NE90710//ORW11.

PI 640314. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D311; 98G816-P-42 gms; NSGC 9209. Pedigree - M44/KS87C58//ORW11.

PI 640315. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D312; 98G819-P-18 gms; NSGC 9210. Pedigree - M46/KS87C55//Gwen.

PI 640316. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D313; 98G824-P-13 gms; NSGC 9211. Pedigree - Excel/TX89D8040//Gwen.

PI 640317. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D314; 98G825-P-26 gms; NSGC 9212. Pedigree - Excel/TX89D8040//86AB474.

PI 640318. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D315; 98G825-P-28 gms; NSGC 9213. Pedigree - Excel/TX89D8040//86AB474.

PI 640319. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D316; 98G825-P-38 gms; NSGC 9214. Pedigree - Excel/TX89D8040//86AB474.

PI 640320. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D317; 98G826-P-23 gms; NSGC 9215. Pedigree - Excel/TX89D8040//88AB926.

PI 640321. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D318; 98G826-P-26 gms; NSGC 9216. Pedigree - Excel/TX89D8040//88AB926.

PI 640322. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D319; 98G827-P-28 gms; NSGC 9217. Pedigree - Excel/TX89D8040//92AB999.

PI 640323. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D320; 98G828-P-5 gms; NSGC 9218. Pedigree - Hazen/TX89D8036//Gwen.

PI 640324. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D321; 98G828-P-29 gms; NSGC 9219. Pedigree - Hazen/TX89D8036//Gwen.

PI 640325. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D322; 98G829-P-4 gms; NSGC 9220. Pedigree - Hazen/TX89D8036//88AB926.

PI 640326. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D323; 98G829-P-46 gms; NSGC 9221. Pedigree - Hazen/TX89D8036//88AB926.

PI 640327. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D324; 98G831-P-13 gms; NSGC 9222. Pedigree - Morex/Excel//KS87C55/3/ORW10.

PI 640328. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D325; 98G833-P-38 gms; NSGC 9223. Pedigree - Russell/GA761522//Gwen.

PI 640329. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D326; 98G835-P-3 gms; NSGC 9224. Pedigree - Russell/GA761522//88AB926.

PI 640330. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D327; 98G836-P-28 gms; NSGC 9225. Pedigree - 6B80-761/TX89D8042//Gwen.

PI 640331. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D328; 98G837-P-4 gms; NSGC 9226. Pedigree - 6B80-761/TX89D8042//ORW10.

PI 640332. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D329; 98G838-P-1 gms; NSGC 9227. Pedigree - 6B80-761/TX89D8042//ORW11.

PI 640333. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D330; 98G840-P-5 gms; NSGC 9228. Pedigree - 6B80-761/TX89D8042//86AB474.

PI 640334. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D331; 98G840-P-21 gms; NSGC 9229. Pedigree - 6B80-761/TX89D8042//86AB474.

PI 640335. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D332; 98G840-P-41 gms; NSGC 9230. Pedigree - 6B80-761/TX89D8042//86AB474.

PI 640336. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D333; 98G844-P-8 gms; NSGC 9231. Pedigree - M44/NE90710//OK95946.

PI 640337. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D334; 98G844-P-13 gms; NSGC 9232. Pedigree - M44/NE90710//OK95946.

PI 640338. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D335; 98G845-P-31 gms; NSGC 9233. Pedigree - M44/NE90710//OK96887.

PI 640339. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D336; 98G846-P-45 gms; NSGC 9234. Pedigree - M44/KS87C58//OK91806.

PI 640340. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D337; 98G851-P-18 gms; NSGC 9235. Pedigree - M44/KS87C58//OK96851.

PI 640341. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D338; 98G859-P-2 gms; NSGC 9236. Pedigree - Excel/TX89D8040//OK95946.

PI 640342. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D339; 98G860-P-24 gms; NSGC 9237. Pedigree - Excel/TX89D8040//OK96887.

PI 640343. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D340; 98G862-P-10 gms; NSGC 9238. Pedigree - Hazen/TX89D8036//OK95946.

PI 640344. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D341; 98G866-P-1 gms; NSGC 9239. Pedigree - Morex/NE90721//OK95946.

PI 640345. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D342; 98G866-P-20 gms; NSGC 9240. Pedigree - Morex/NE90721//OK95946.

PI 640346. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D343; 98G867-P-22 gms; NSGC 9241. Pedigree - Morex/Excel//KS87C55/3/OK95920.

PI 640347. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D344; 98G872-P-32 gms; NSGC 9242. Pedigree - Morex/Excel//TX89D8042/3/OK96874.

PI 640348. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D345; 98G872-P-46 gms; NSGC 9243. Pedigree - Morex/Excel//TX89D8042/3/OK96874.

PI 640349. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D346; 98G877-P-38 gms; NSGC 9244. Pedigree - Russell/GA761522//OK96887.

PI 640350. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D347; 98G880-P-5 gms; NSGC 9245. Pedigree - Karla/NE90710//OK96887.

PI 640351. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D348; 98G880-P-28 gms; NSGC 9246. Pedigree - Karla/NE90710//OK96887.

PI 640352. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D349; 98G884-P-11 gms; NSGC 9247. Pedigree - 6B80-761/TX89D8042//OK96887.

PI 640353. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D350; 98G884-P-15 gms; NSGC 9248. Pedigree - 6B80-761/TX89D8042//OK96887.

PI 640354. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D351; 98G888-P-15 gms; NSGC 9249. Pedigree - ND5570/ND10981//NE86594.

PI 640355. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D352; 98G890-P-7 gms; NSGC 9250. Pedigree - ND5570/ND10981//TAMBAR 500.

PI 640356. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D353; 98G892-P-15 gms; NSGC 9251. Pedigree - ND5570/ND10981//86AB474.

PI 640357. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D354; 98G893-P-32 gms; NSGC 9252. Pedigree - ND5570/ND10981//88AB926.

PI 640358. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D355; 98G895-P-19 gms; NSGC 9253. Pedigree - ND5570/ND12201//Boyer.

PI 640359. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D356; 98G895-P-26 gms; NSGC 9254. Pedigree - ND5570/ND12201//Boyer.

PI 640360. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D357; 98G895-P-34 gms; NSGC 9255. Pedigree - ND5570/ND12201//Boyer.

PI 640361. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D358; 98G898-P-15 gms; NSGC 9256. Pedigree - ND5570/ND12201//Post 90.

PI 640362. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D359; 98G905-P-19 gms; NSGC 9257. Pedigree - Morex/ND11055//Eight-Twelve.

PI 640363. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D360; 98G906-P-2 gms; NSGC 9258. Pedigree - Morex/ND11055//Gwen.

PI 640364. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D361; 98G907-P-5 gms; NSGC 9259. Pedigree - Morex/ND11055//NE86594.

PI 640365. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D362; 98G907-P-28 gms; NSGC 9260. Pedigree - Morex/ND11055//NE86594.

PI 640366. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D363; 98G907-P-47 gms; NSGC 9261. Pedigree - Morex/ND11055//NE86594.

PI 640367. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D364; 98G908-P-10 gms; NSGC 9262. Pedigree - Morex/ND11055//ORW11.

PI 640368. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D365; 98G908-P-12 gms; NSGC 9263. Pedigree - Morex/ND11055//ORW11.

PI 640369. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D366; 98G911-P-9 gms; NSGC 9264. Pedigree - Morex/B1614//Boyer.

PI 640370. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D367; 98G914-P-3 gms; NSGC 9265. Pedigree - Morex/B1614//NE86594.

PI 640371. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D368; 98G918-P-26 gms; NSGC 9266. Pedigree - Morex/B1614//92AB999.

PI 640372. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D369; 98G922-P-62 gms; NSGC 9267. Pedigree - Morex/B2601//ORW10.

PI 640373. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D370; 98G924-P-16 gms; NSGC 9268. Pedigree - Morex/B2601//TX91D7876.

PI 640374. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D371; 98G924-P-21 gms; NSGC 9269. Pedigree - Morex/B2601//TX91D7876.

PI 640375. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D372; 98G924-P-28 gms; NSGC 9270. Pedigree - Morex/B2601//TX91D7876.

PI 640376. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D373; 98G932-P-7 gms; NSGC 9271. Pedigree - Russell/88Y98//Gwen.

PI 640377. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D374; 98G933-P-16 gms; NSGC 9272. Pedigree - Russell/88Y98//Post 90.

PI 640378. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D375; 98G935-P-17 gms; NSGC 9273. Pedigree - Russell/88Y98//TX91D7876.

PI 640379. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D376; 98G937-P-30 gms; NSGC 9274. Pedigree - Robust/Excel//Stander/3/Eight-Twelve.

PI 640380. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D377; 98G938-P-1 gms; NSGC 9275. Pedigree - Robust/Excel//Stander/3/Gwen.

PI 640381. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D378; 98G938-P-28 gms; NSGC 9276. Pedigree - Robust/Excel//Stander/3/Gwen.

PI 640382. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D379; 98G939-P-45 gms; NSGC 9277. Pedigree - Robust/Excel//Stander/3/Post 90.

PI 640383. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D380; 98G940-P-11 gms; NSGC 9278. Pedigree - Robust/Excel//WA10489-86/3/Boyer.

PI 640384. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D381; 98G940-P-40 gms; NSGC 9279. Pedigree - Robust/Excel//WA10489-86/3/Boyer.

PI 640385. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D382; 98G941-P-4 gms; NSGC 9280. Pedigree - Robust/Excel//WA10489-86/3/Eight-Twelve.

PI 640386. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D383; 98G941-P-6 gms; NSGC 9281. Pedigree - Robust/Excel//WA10489-86/3/Eight-Twelve.

PI 640387. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D384; 98G941-P-10 gms; NSGC 9282. Pedigree - Robust/Excel//WA10489-86/3/Eight-Twelve.

PI 640388. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D385; 98G941-P-13 gms; NSGC 9283. Pedigree - Robust/Excel//WA10489-86/3/Eight-Twelve.

PI 640389. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D386; 98G942-P-11 gms; NSGC 9284. Pedigree - Robust/Excel//WA10489-86/3/Gwen.

PI 640390. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D387; 98G944-P-22 gms; NSGC 9285. Pedigree - Robust/Excel//WA10489-86/3/NE86594.

PI 640391. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D388; 98G944-P-34 gms; NSGC 9286. Pedigree - Robust/Excel//WA10489-86/3/NE86594.

PI 640392. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D389; 98G944-P-44 gms; NSGC 9287. Pedigree - Robust/Excel//WA10489-86/3/NE86594.

PI 640393. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D390; 98G949-1 gms; NSGC 9288. Pedigree - Robust/Excel//WA10489-86/3/86AB474-P-.

PI 640394. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D391; 98G949-41 gms; NSGC 9289. Pedigree - Robust/Excel//WA10489-86/3/86AB474-P-.

PI 640395. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D392; 98G951-P-37 gms; NSGC 9290. Pedigree - Robust/Excel//WA10489-86/3/92AB999.

PI 640396. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D393; 98G954-P-25 gms; NSGC 9291. Pedigree - Robust/M66//Post 90.

PI 640397. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D394; 98G954-P-31 gms; NSGC 9292. Pedigree - Robust/M66//Post 90.

PI 640398. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D395; 98G954-P-45 gms; NSGC 9293. Pedigree - Robust/M66//Post 90.

PI 640399. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D396; 98G954-P-49 gms; NSGC 9294. Pedigree - Robust/M66//Post 90.

PI 640400. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D397; 98G955-P-4 gms; NSGC 9295. Pedigree - Robust/M66//NE86594.

PI 640401. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D398; 98G957-P-15 gms; NSGC 9296. Pedigree - Robust/M66//ORW11.

PI 640402. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D399; 98G957-P-37 gms; NSGC 9297. Pedigree - Robust/M66//ORW11.

PI 640403. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D400; 98G958-P-16 gms; NSGC 9298. Pedigree - Robust/M66//TX91D7876.

PI 640404. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D401; 98G958-P-22 gms; NSGC 9299. Pedigree - Robust/M66//TX91D7876.

PI 640405. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D402; 98G959-P-31 gms; NSGC 9300. Pedigree - Robust/M66//86AB474.

PI 640406. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D403; 98G960-P-8 gms; NSGC 9301. Pedigree - Robust/M66//88AB926.

PI 640407. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D404; 98G961-P-13 gms; NSGC 9302. Pedigree - Robust/87AB9478//Boyer.

PI 640408. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D405; 98G962-P-2 gms; NSGC 9303. Pedigree - Robust/87AB9478//Eight-Twelve.

PI 640409. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D406; 98G963-P-12 gms; NSGC 9304. Pedigree - Robust/87AB9478//Post 90.

PI 640410. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D407; 98G963-P-35 gms; NSGC 9305. Pedigree - Robust/87AB9478//Post 90.

PI 640411. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D408; 98G963-P-42 gms; NSGC 9306. Pedigree - Robust/87AB9478//Post 90.

PI 640412. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D409; 98G964-P-2 gms; NSGC 9307. Pedigree - Robust/87AB9478//NE86594.

PI 640413. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D410; 98G964-P-8 gms; NSGC 9308. Pedigree - Robust/87AB9478//NE86594.

PI 640414. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D411; 98G964-P-35 gms; NSGC 9309. Pedigree - Robust/87AB9478//NE86594.

PI 640415. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D412; 98G965-P-11 gms; NSGC 9310. Pedigree - Robust/87AB9478//ORW10.

PI 640416. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D413; 98G966-P-13 gms; NSGC 9311. Pedigree - Robust/87AB9478//92AB999.

PI 640417. Hordeum vulgare L. **subsp. vulgare**
Breeding. Pureline. TX01D414; 98G970-P-8 gms; NSGC 9312. Pedigree - Robust/91AB7655//92AB999.

The following were developed by Robert T. Lewellen, USDA, ARS, Crop Improvement and Protection Research, 1639 E. Alisal St., Salinas, California 93905, United States. Received 09/29/2005.

PI 640418. Beta vulgaris L.
Breeding. Population. CP09CT; P531CT; P431CT. Pedigree - Recombination of roots selected from C78/3 (PI 628752), CP06 (PI 632287) and CP07 (PI 632288). Represents an introgression of B. vulgaris spp. maritima germplasm in C78/3 background. Multigerm (MM), SsSs, germplasm line with moderate resistance to Curly top virus. Powdery mildew resistance (Pm) from WB242 and WB97. Rz1 for resistance to rhizomania. Moderately nonbolting. Mixed red and green (34%) hypocotyls. Source of resistance to disease and high sugar yield productivity. May segregate for resistance to sugarbeet cyst nematode from WB242 and/or C51 (PI 593694). Recombined plants selected under high CTV, rhizomania, and root rot pressure in San Joaquin Valley.

PI 640419. Beta vulgaris L.
Breeding. CR11-88; CR511-88; CR311-88. Pedigree - Descended from one half-sib family selected from population CR11 (PI 636343). Moderately based multigerm, self-fertile, genetic-male-sterile facilitated, random mated population with moderate resistance to Cercospora leaf spot. Moderately nonbolting, resistant to rhizomania (Rz1), and moderately susceptible to Curly top virus. Produces large, erect leaves, and tall seed stalks. As a line and in hybrid combinations, it has intermediate sugar concentration and high root yield. Is multigerm (MM), self-fertile (Sf), and segregates for genetic ms (A:aa) and hypocotyl color (R:rr) (91% rr). 12.5% of its germplasm was derived from Italian Cercospora leaf spot (C. beticola) resistant accessions obtained in 1988 crossed into a C931 (PI 636340) background.

PI 640420. Beta vulgaris L.
Breeding. CN927-202; 5927-202; 4927-202. GP-260. Pedigree - Partially inbred line derived from C50 (PI 564243) through C51 (PI 593694) in a C931 (PI 636340) background. Is a second cycle S1 selection from C927-4 (PI 628756). Is RR, MM, SfSf, partially inbred line that segregates for genetic ms (A:aa) and Rz1 for resistance to rhizomania caused by Beet necrotic yellow vein virus. Moderately resistant to Curly top virus and virus yellows with moderate nonbolting tendency. As a line it has low vigor but in experimental hybrids produces good root and sugar yield with fair sugar concentration. Has near parental line characteristics but will be most useful as a source of resistance to sugarbeet cyst nematode. Allelism to CN12 (PI 636338) and CN72 (PI 636339) is undetermined. Nematode resistance is not Hs-1 from B. procumbens. 12.5 % germplasm is from Beta vulgaris spp. maritima.

PI 640421. Beta vulgaris L.
Breeding. CN926-11-3-22; 5926-11-3-22; 4926-11-3-22. GP-261. Pedigree - Partially inbred line derived from Beta vulgaris spp. maritima through C51 (PI 593694) in a C931 (PI 636340) background. Increased from a single S3 family. Is rr, MM, and SfSf with Rz1 resistance to rhizomania caused by Beet necrotic yellow vein virus. Moderately susceptible to Curly top virus and moderately resistant to virus yellows. Has intermediate nonbolting tendency. As a line it has low vigor but in experimental hybrids had near commercial parental line values for sugar concentration and sugar yield. Along with its hybrids may be useful to evaluate nematode resistance under field conditions and to compare its efficacy with that of Hs-1 from Beta procumbens. Allelism to CN927-202, CN12 (PI 636338), CN72 (PI 636339) and CN921-306 is undertermined. About 2% of germplasm is from B. maritima. Nematode resistance appears to be simple, dominant inheritance.

PI 640422. Beta vulgaris L.
Breeding. CN921-306; 5921-306. GP-262. Pedigree - An increase of one S1 line that segregated for resistance to sugarbeet cyst nematode (Heterodera schachtii) derived from a broad base of Beta vulgaris spp. maritima germplasm. Is rr, MM, SfSf, and segregates for resistance to rhizomania (Rz1), caused by Beet necrotic yellow vein virus, and genetic ms (A:aa). About 27% of its germplasm is from B. vulgaris spp. maritima through C51, C26 (PI 610488) and C27 (PI 610489) in a C931 (PI 636341) background. It segregates for resistance to sugarbeet cyst nematode. Retains some wild beet traits in terms of growth habit and ease of bolting. Seed stalks are lax and readily lodge. Useful only as a potential source of resistance to nematode.

The following were developed by A. Sarker, Int. Center for Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria; Kadambot Siddique, Centre for Legumes in Mediterranean Agriculture, The University of Western Australia, 35 Stirling Highway, Crawley, Western Australia, Australia; C.L. Hanbury, Dept. of Agriculture Western Australia, Baron-Hay Court, South Perth, Western Australia 6151, Australia. Received 09/23/2005.

PI 640423 QUAR. Lathyrus sativus L.
Cultivar. CEORA. CV-259. Pedigree - Derived from a cross using female parent K33 (Pakistan) x male parent 8604 (Bangladesh). The F1 was grown during summer of 1994-1995. F2 bulk was grown in isolation during 1995; individual plant selections were made based on vigour and F4 seed collec ted in 1996. Hardy annual cool season legume with growth habit similar to field pea. Semi-erect rowth habit; no anthocyanin coloration on the plant. Stem is fasciated, with short to medium length (x=519 mm) and tendrils. Time to flowering is early to medium; has white flowers with central dark blue flecking. Seed shape is angular and color of testa is grey orange with cotyledon color yellow. Produced on average 0.5 to 1.8 t Ha-1 seed yield. Dry matter production at flowering similar to or greater than field pea especially with early sowings. Tissue N content is about 45%, indicating good potential for green manuring. Low ODP content in seed, protein content of about 30%. No serious fungal disease has been recorded on Coera on Western Australia. Ceora intended to fulfill a multi-purpose role as a low-cost, low-input grain legume, green forage species, hay or green manure crop. Best adapted to medium to heavy textured soils of southern Australia where annual rainfall ranges between 300-650 mm. Very low level of neurotoxin 3-(-N-oxalyl)-L_2, 3-diamino propionic acid (ODAP) content in the seed (0.04-0.09%).

The following were developed by Greg D. Kushnak, Montana State University, Western Triangle Agric. Research Center, P.O. Box 1474, Conrad, Montana 59425, United States; Phil L. Bruckner, Montana State University, Dept. of Plant Sciences & Plant Pathology, 407 Leon Johnson Hall, Bozeman, Montana 59717, United States; N.R. Riveland, Williston Research Extension Center, North Dakota Agric. Exp. Sta., 14120 Highway 2, Williston, North Dakota 58801, United States; G.R. Carlson, Montana State University, Northern Agric. Research Center, Star Rt. 36, Havre, Montana 59501, United States; Joyce L. Eckhoff, Montana State University, Eastern Agric. Research Center, 1501 N. Central Avenue, Sidney, Montana 59270, United States; D.W. Wichman, Montana State University, Central Agric. Research Center, Moccasin, Montana 59462,

United States; Robert N. Stougaard, Montana State University, Northwestern Agric. Research Center, 4570 MT Hwy 35, Kalispell, Montana 59901, United States; J.E. Berg, Montana State University, Dept. of Plant, Soil & Environmental Sciences, Bozeman, Montana 59717, United States; Ken Kephart, Montana State University, MSU Southern Ag. Research Center, 748 Railroad Highway, Huntley, Montana 59037, United States; D. Nash, Montana State University, Montana, United States. Received 08/29/2005.

PI 640424. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "GENOU"; MTS0031. CV-986; PVP 200500334. Pedigree - MTS92015 // Vanguard / Norstar = Lew / Tiber // Redwin / 3 / Vanguard / Norstar. Awned, white-chaffed, solid-stem hard red winter wheat. Medium maturity, 162 d (n=36) to heading from 1 January. Relatively tall (81 cm, n=60). Coleoptile length is relatively long. Stem solidness (5=hollow to 25=solid) is 19.6, n=22. Moderately susceptible to stem rust and susceptible to leaf rust, stripe rust, and Russian wheat aphid.

The following were developed by Greg D. Kushnak, Montana State University, Western Triangle Agric. Research Center, P.O. Box 1474, Conrad, Montana 59425, United States; Phil L. Bruckner, Montana State University, Dept. of Plant Sciences & Plant Pathology, 407 Leon Johnson Hall, Bozeman, Montana 59717, United States; Eugene A. Hockett, USDA, ARS, Montana State University, Plant and Soil Science Department, Bozeman, Montana 59717, United States; N.R. Riveland, Williston Research Extension Center, North Dakota Agric. Exp. Sta., 14120 Highway 2, Williston, North Dakota 58801, United States; G.R. Carlson, Montana State University, Northern Agric. Research Center, Star Rt. 36, Havre, Montana 59501, United States; Joyce L. Eckhoff, Montana State University, Eastern Agric. Research Center, 1501 N. Central Avenue, Sidney, Montana 59270, United States; D.W. Wichman, Montana State University, Central Agric. Research Center, Moccasin, Montana 59462, United States; Robert N. Stougaard, Montana State University, Northwestern Agric. Research Center, 4570 MT Hwy 35, Kalispell, Montana 59901, United States; J.E. Berg, Montana State University, Dept. of Plant, Soil & Environmental Sciences, Bozeman, Montana 59717, United States; Ken Kephart, Montana State University, MSU Southern Ag. Research Center, 748 Railroad Highway, Huntley, Montana 59037, United States; D. Nash, Montana State University, Montana, United States. Received 08/29/2005.

PI 640425. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "PAUL"; MT9426. CV-985; PVP 200500335. Pedigree - MT8030 / Neeley = TAM W-103 / Froid / 4 / Yogo / Turkey Red / Oro / 3 / Centurk / 5 / Neeley. Released 2003. Awned, white-chaffed, semidwarf hard red winter wheat. Medium maturity, 164 d to heading from 1 January. Plant height 73 cm. Winter survival in 13 trials showing differential survival was 59%. Straw strength moderate, cultivar will often lodge under high yield conditions. Moderately susceptible to stem rust and susceptible to leaf rust, stripe rust, Hessian fly, Russian wheat aphid, and wheat stem sawfly. Grain volume weight 753 kg m-3. Grain protein content (n=95) is 134 g kg-1. Milling and bread baking characteristics are good. Brabender Automat flour extraction is 650 g kg-1. Flour ash = 3.8 g kg-1. Bake water absorption = 708 g kg-1. Bake mixing time = 8.0 min. Pup loaf volume is 1061 cc.

The following were developed by Kimberlee Kidwell, Washington State University, Dept. of Crop & Soil Sciences, Pullman, Washington 99164-6420,

United States; Kimberly Garland Campbell, USDA, ARS, Washington State University, P.O. Box 646420, Pullman, Washington 99164-6420, United States; Melissa McClendon, Washington State University, Dept. of Crop & Soil Sciences, 201 Johnson Hall, Pullman, Washington 99164-6420, United States; Dipak Santra, Washington State University, Dept. of Crop & Soil Sciences, PBS1 207, Pullman, Washington 99164-6420, United States. Received 09/30/2005.

PI 640426. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SRS05049; NSGC 9988. Pedigree - BC4F4 line derived from Scarlet*5/4/Scarlet//Yr5/6*Avocet/3/Scarlet//Yr15/6*Avocet. Near-isogenic backcross derivative of Scarlet that contains chromosome regions on 2BS from Yr5/6*Avocet and on 1BS from Yr15/6*Avocet that carry stripe rust seedling resistance genes Yr5 and Yr15, respectively. This genotype is expected to confer resistance to known races of stripe rust in North America. Flanking markers Yr5STS-7/8 CAPS DpnII, Xwmc175 and Xbarc167 for Yr5 and Xwgp34, Xgwm934 and Xgwm33 for Yr15 were used via marker-assisted selection to monitor for the presence of these seedling resistance genes during the backcrossing process. SRS05049 is a hard red spring wheat which is tall, white-awned with mid-season maturity and white glumes. It is targeted for production in the semi-arid to intermediate rainfall (<400 mm average annual precipitation) non-irrigated wheat production regions of Washington State based on its superior stripe rust resistance.

PI 640427. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SRS05189; NSGC 9989. Pedigree - BC4F4 line derived from Scarlet*5/4/Scarlet//Yr5/6*Avocet/3/Scarlet//Yr15/6*Avocet. Near-isogenic backcross derivative of Scarlet that contains chromosome regions on 2BS from Yr5/6*Avocet and on 1BS from Yr15/6*Avocet that carry stripe rust seedling resistance genes Yr5 and Yr15, respectively. This genotype is expected to confer resistance to known races of stripe rust in North America. Flanking markers Yr5STS-7/8 CAPS DpnII, Xwmc175 and Xbarc167 for Yr5 and Xwgp34, Xgwm934 and Xgwm33 for Yr15 were used via marker-assisted selection to monitor for the presence of these seedling resistance genes during the backcrossing process. SRS05189 is a hard red spring wheat which is tall, white-awned with mid-season maturity and white glumes. It is targeted for production in the semi-arid to intermediate rainfall (<400 mm average annual precipitation) non-irrigated wheat production regions of Washington State based on its superior stripe rust resistance.

PI 640428. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SRS05192; NSGC 9990. Pedigree - BC4F4 line derived from Scarlet*5/4/Scarlet//Yr5/6*Avocet/3/Scarlet//Yr15/6*Avocet. Near-isogenic backcross derivative of Scarlet that contains chromosome regions on 2BS from Yr5/6*Avocet and on 1BS from Yr15/6*Avocet that carry stripe rust seedling resistance genes Yr5 and Yr15, respectively. This genotype is expected to confer resistance to known races of stripe rust in North America. Flanking markers Yr5STS-7/8 CAPS DpnII, Xwmc175 and Xbarc167 for Yr5 and Xwgp34, Xgwm934 and Xgwm33 for Yr15 were used via marker-assisted selection to monitor for the presence of these seedling resistance genes during the backcrossing process. SRS05192 is a hard red spring wheat which is tall, white-awned with mid-season maturity and white glumes. It is targeted for production in the semi-arid to intermediate rainfall (<400 mm average annual precipitation) non-irrigated wheat production regions of Washington State based on its superior stripe rust resistance.

PI 640429. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SRW05554; NSGC 9991. Pedigree - BC3F4 line derived from WA007900*4/4/WA007900//Yr5/6*Avocet/3/WA007900//Yr15/6*Avocet. Near-isogenic backcross derivative of WA007900 that contains chromosome regions on 2BS from Yr5/6*Avocet and on 1BS from Yr15/6*Avocet that carry stripe rust seedling resistance genes Yr5 and Yr15, respectively. This genotype is expected to confer resistance to known races of stripe rust in North America. Flanking markers Yr5STS-7/8 CAPS DpnII, Xwmc175 and Xbarc167 for Yr5 and Xwgp34, Xgwm934 and Xgwm33 for Yr15 were used via marker-assisted selection to monitor for the presence of these seedl ing resistance genes during the backcrossing process. SRW05554 is an awned, common semi-dwarf hard white spring wheat with mid-season maturity. It is targeted for production in the intermediate to high rainfall (>400 mm average annual precipitation), non-irrigated wheat production regions of Washington State based on its superior stripe rust resistance.

PI 640430. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SRW05611; NSGC 9992. Pedigree - BC3F4 line derived from WA007900*4/4/WA007900//Yr5/6*Avocet/3/WA007900//Yr15/6*Avocet. Near-isogenic backcross derivative of WA007900 that contains chromosome regions on 2BS from Yr5/6*Avocet and on 1BS from Yr15/6*Avocet that carry stripe rust seedling resistance genes Yr5 and Yr15, respectively. This genotype is expected to confer resistance to known races of stripe rust in North America. Flanking markers Yr5STS-7/8 CAPS DpnII, Xwmc175 and Xbarc167 for Yr5 and Xwgp34, Xgwm934 and Xgwm33 for Yr15 were used via marker-assisted selection to monitor for the presence of these seedl ing resistance genes during the backcrossing process. SRW05611 is an awned, common semi-dwarf hard white spring wheat with mid-season maturity. It is targeted for production in the intermediate to high rainfall (>400 mm average annual precipitation), non-irrigated wheat production regions of Washington State based on its superior stripe rust resistance.

PI 640431. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SRW05619; NSGC 9993. Pedigree - BC3F4 line derived from WA007900*4/4/WA007900//Yr5/6*Avocet/3/WA007900//Yr15/6*Avocet. Near-isogenic backcross derivative of WA007900 that contains chromosome regions on 2BS from Yr5/6*Avocet and on 1BS from Yr15/6*Avocet that carry stripe rust seedling resistance genes Yr5 and Yr15, respectively. This genotype is expected to confer resistance to known races of stripe rust in North America. Flanking markers Yr5STS-7/8 CAPS DpnII, Xwmc175 and Xbarc167 for Yr5 and Xwgp34, Xgwm934 and Xgwm33 for Yr15 were used via marker-assisted selection to monitor for the presence of these seedl ing resistance genes during the backcrossing process. SRW05619 is an awned, common semi-dwarf hard white spring wheat with mid-season maturity. It is targeted for production in the intermediate to high rainfall (>400 mm average annual precipitation), non-irrigated wheat production regions of Washington State based on its superior stripe rust resistance.

The following were developed by Tommy E. Carter, USDA-ARS, Soybean and Nitrogen Fixation Research, 3127 Ligon Street, Raleigh, North Carolina 27607, United States; Joe W. Burton, USDA-ARS, Plant Science Research Building, 3127 Ligon Street, Raleigh, North Carolina 27607, United States; Daryl T. Bowman,

North Carolina State University, Department of Crop Science, Box 8604, Raleigh, North Carolina 27695-8604, United States; Myron Fountain, USDA - ARS, 3127 Ligon St., Raleigh, North Carolina 27607, United States; M.R. Villagarcia, USDA-ARS, 3127 Ligon Street, Raleigh, North Carolina 27607, United States. Received 10/05/2005.

PI 640432. Glycine max (L.) Merr.
Breeding. Pureline. "NC114"; SY 515001. GP-324. Pedigree - NC114 is an F4-derived selection from the cross of two USDA small-seeded parents, soybean breeding line NTCPR90-143 and cultivar 'Pearl'. The parents of NTCPR90-143 were 'Gasoy 17' and 'Vance'. Vance was obtained from the cross of 'Essex' and an unknown wild (Glycine soja Sieb. and Zucc.) or semi-wild soybean. NC114 is a group VI maturity, adapted to southern USA and released as parent material for development of soyfoods cultivars. The 100-seed weight was 8.5 grams for NC114. The plant height of NC114 was 77 cm. Seed protein and oil concentrations of NC114 are 421 and 179 g/kg, respectively (zero moisture basis0. NC114 had a seed swell ratio of 2.29. Seed yield is about 75% of commercial varieties of the same maturity. NC114 has narrow leaflets, white flowers, gray pubescence, tan pod wall color at maturity, and glossy yellow seed with clear hila. NC114 is resistant to Soybean Mosaic Virus, and bacterial pustule [Xanthomonas campestris pv. glycines (Nakano) Dye], but susceptible to frogeye leaf spot (Cercospora sojina K. Hara), soybean cyst (Heterodera glycines Ichinohe) and root knot (Meloidogyne species) nematodes.

PI 640433. Glycine max (L.) Merr.
Breeding. Pureline. "NC115"; SY 515002. GP-325. Pedigree - NC115 is an F4-derived plant selection from the cross of two small-seeded USDA soybean breeding lines, EBH91-6 and N89-1284. EBH91-6 is a sub-line selected from 'Pearl' and is phenotypically identical to 'Pearl'. N89-1284 was developed from the cross of 'Essex' and 'Vance'. NC115 is a group VI maturity, adapted to southern USA and released as parent material for development of soyfoods cultivars. The 100-seed weight was 8.5 grams for NC115. The plant height of NC115 was 71 cm. Seed protein and oil concentrations of NC115 are 402 and 193 g/kg, respectively (zero moisture basis0. NC115 had a seed swell ratio of 2.25. Seed yield is about 75% of commercial varieties of the same maturity. NC115 has narrow leaflets, white flowers, gray pubescence, tan pod wall color at maturity, and glossy yellow seed with clear hila. NC115 is resistant to Soybean Mosaic Virus, and bacterial pustule [Xanthomonas campestris pv. glycines (Nakano) Dye], but susceptible to frogeye leaf spot (Cercospora sojina K. Hara), soybean cyst (Heterodera glycines Ichinohe) and root knot (Meloidogyne species) nematodes.

The following were donated by Asian Vegetable Research and Development Center, P.O. Box 42, Shanhua, Tainan, Taiwan. Received 01/25/1999.

PI 640434. Capsicum annuum L.
Cultivar. "Orozco"; PBC 2; Grif 15258. Collected in Unknown. Cayenne type.

PI 640435. Capsicum annuum L.
Cultivar. "MC4-(18)"; PBC 18; Grif 15263. Collected in Malaysia. Cayenne type.

PI 640436. *Capsicum annuum* L.
Cultivar. "Cipanas (Arthur)"; PBC 19; Grif 15264. Collected in Indonesia. Keriting type.

PI 640437. *Capsicum annuum* L.
Cultivar. "MC4-(30)"; PBC 30; Grif 15265. Collected in Malaysia. Cayenne type.

PI 640438. *Capsicum annuum* L.
Cultivar. "MC4-(33)"; PBC 33; Grif 15267. Collected in Malaysia. Cayenne type.

PI 640439. *Capsicum annuum* L.
Cultivar. "Friesdorfer Selex"; PBC 34; Grif 15268. Collected in Netherlands. Cayenne type.

PI 640440. *Capsicum annuum* L.
Cultivar. "MC4-(36)"; PBC 36; Grif 15269. Collected in Malaysia. Cayenne type.

PI 640441. *Capsicum annuum* L.
Cultivar. "Bhaskar"; PBC 59; Grif 15270. Collected in India. Cayenne type.

PI 640442. *Capsicum annuum* L.
Cultivar. "MC4-(61)"; PBC 61; Grif 15271. Collected in Malaysia. Cayenne type.

PI 640443. *Capsicum annuum* L.
Cultivar. "MC4-(63)"; PBC 63; Grif 15272. Collected in Malaysia. Cayenne type.

PI 640444. *Capsicum annuum* L.
Cultivar. "MC4-(66)"; PBC 64; Grif 15273. Collected in Malaysia. Cayenne type.

PI 640445. *Capsicum annuum* L.
Cultivar. "Szechwan 1"; PBC 65; Grif 15274. Collected in Taiwan. Cayenne type.

PI 640446. *Capsicum annuum* L.
Cultivar. "MC-4"; PBC 66; Grif 15275. Collected in Malaysia. Cayenne type.

PI 640447. *Capsicum annuum* L.
Cultivar. "Szechwan 2"; PBC 68; Grif 15276. Collected in Taiwan. Cayenne type.

PI 640448. *Capsicum annuum* L.
Cultivar. "Szechwan 3"; PBC 69; Grif 15277. Collected in Taiwan. Cayenne type.

PI 640449. *Capsicum annuum* L.
Cultivar. "Szechwan 4"; PBC 70; Grif 15278. Collected in Taiwan. Cayenne type.

PI 640450. Capsicum annuum L.
Cultivar. "Szechwan 5"; PBC 71; Grif 15279. Collected in Taiwan. Cayenne type.

PI 640451. Capsicum annuum L.
Cultivar. "Vindel"; PBC 72; Grif 15280. Collected in Israel. Conibell type.

PI 640452. Capsicum annuum L.
Cultivar. "Num-598"; PBC 73; Grif 15281. Collected in Guatemala. Cayenne type.

PI 640453. Capsicum annuum L.
Cultivar. "Szechwan 8"; PBC 74; Grif 15282. Collected in Taiwan. Cayenne type.

PI 640454. Capsicum annuum L.
Cultivar. "Szechwan 9"; PBC 75; Grif 15283. Collected in Taiwan. Cayenne type.

PI 640455. Capsicum annuum L.
Cultivar. "Surakta"; PBC 77; Grif 15285. Collected in India. Cayenne type.

PI 640456. Capsicum annuum L.
Cultivar. "KTPL 19"; PBC 83; Grif 15286. Collected in India. Paprika type.

PI 640457. Capsicum annuum L.
Cultivar. "Utkal Ragini"; PBC 87; Grif 15287. Collected in India. Cayenne type.

PI 640458. Capsicum annuum L.
Cultivar. "NuMex R. Naky"; PBC 90; Grif 15288. Collected in United States. New Mexican type.

PI 640459. Capsicum annuum L.
Cultivar. "New Mexico 6-4"; PBC 91; Grif 15289. Collected in United States. New Nexican type.

PI 640460. Capsicum annuum L.
Cultivar. "Kyomidori"; PBC 92; Grif 15290. Collected in China. Elong. bell type.

PI 640461. Capsicum annuum L.
Cultivar. "83-168"; PBC 93; Grif 15291. Collected in China. Cayenne type.

PI 640462. Capsicum annuum L.
Cultivar. "83-176"; PBC 94; Grif 15292. Collected in China. Piquin type.

PI 640463. Capsicum annuum L.
Cultivar. "AKC-86-39"; PBC 96; Grif 15294. Collected in India. Cayenne type.

PI 640464. Capsicum annuum L.
Cultivar. PBC 98; Grif 15295. Collected in Thailand. Cayenne type.

PI 640465. *Capsicum annuum* L.
Cultivar. PBC 99; Grif 15296. Collected in Thailand. Cayenne type.

PI 640466. *Capsicum annuum* L.
Cultivar. "Unknown Y11"; PBC 100; Grif 15297. Collected in Thailand. Cayenne type.

PI 640467. *Capsicum annuum* L.
Cultivar. "Unknown Y12"; PBC 101; Grif 15298. Collected in Thailand. Cayenne type.

PI 640468. *Capsicum annuum* L.
Cultivar. "Unknown Y13"; PBC 102; Grif 15299. Collected in Thailand. Cayenne type.

PI 640469. *Capsicum annuum* L.
Cultivar. "Unknown Y14"; PBC 103; Grif 15300. Collected in Thailand. Cayenne type.

PI 640470. *Capsicum annuum* L.
Cultivar. PBC 104; Grif 15301. Collected in Thailand. Cayenne type.

PI 640471. *Capsicum annuum* L.
Cultivar. PBC 105; Grif 15302. Collected in Thailand. Cayenne type.

PI 640472. *Capsicum annuum* L.
Cultivar. PBC 106; Grif 15303. Collected in Thailand. Cayenne type.

PI 640473. *Capsicum annuum* L.
Cultivar. "India #1"; PBC 108; Grif 15304. Collected in India. Cayenne type.

PI 640474. *Capsicum annuum* L.
Cultivar. "Cilo"; PBC 110; Grif 15305. Collected in Netherlands. Bell type.

PI 640475. *Capsicum annuum* L.
Cultivar. "Carolina Cayenne"; PBC 112; Grif 15306. Collected in United States. Cayenne type.

PI 640476. *Capsicum annuum* L.
Cultivar. "MI-221"; PBC 114; Grif 15307. Collected in United States. Small wax type.

PI 640477. *Capsicum annuum* L.
Cultivar. "MI-600"; PBC 115; Grif 15308. Collected in United States. Conical type.

PI 640478. *Capsicum annuum* L.
Cultivar. "MI-Gold"; PBC 116; Grif 15309. Collected in United States. Large wax type.

PI 640479. *Capsicum annuum* L.
Cultivar. "HDA 323"; PBC 119; Grif 15310. Collected in France. Cayenne type.

PI 640480. Capsicum annuum L.
Cultivar. "HDA 336"; PBC 120; Grif 15311. Collected in France. Conical type.

PI 640481. Capsicum annuum L.
Cultivar. "HDA 801"; PBC 121; Grif 15312. Collected in France. Conibell type.

PI 640482. Capsicum annuum L.
Cultivar. "HDA 832"; PBC 122; Grif 15313. Collected in France. Cayenne type.

PI 640483. Capsicum annuum L.
Cultivar. "Delhi Round #1"; PBC 129; Grif 15314. Collected in India. Cherry type.

PI 640484. Capsicum annuum L.
Cultivar. "LCA-305"; PBC 134; Grif 15315. Collected in India. Cayenne type.

PI 640485. Capsicum annuum L.
Cultivar. "1535"; PBC 139; Grif 15317. Collected in India. Cayenne type.

PI 640486. Capsicum annuum L.
Cultivar. "Jawahar 218"; PBC 140; Grif 15318. Collected in India. Cayenne type.

PI 640487. Capsicum annuum L.
Cultivar. "X-235"; PBC 141; Grif 15319. Collected in India. Cayenne type.

PI 640488. Capsicum annuum L.
Cultivar. "Pant C-1"; PBC 142; Grif 15320. Collected in India. Cayenne type.

PI 640489. Capsicum annuum L.
Cultivar. "BG-1 (Bangla Green)"; PBC 143; Grif 15321. Collected in India. Cayenne type.

PI 640490. Capsicum annuum L.
Cultivar. "Laichi"; PBC 144; Grif 15322. Collected in India. Cayenne type.

PI 640491. Capsicum annuum L.
Cultivar. "Tiwari"; PBC 145; Grif 15323. Collected in India. Cayenne type.

PI 640492. Capsicum annuum L.
Cultivar. "Ludhiana Long Selection"; PBC 146; Grif 15324. Collected in India. Cayenne type.

PI 640493. Capsicum annuum L.
Cultivar. "Extra Long Selection"; PBC 147; Grif 15325. Collected in India. Cayenne type.

PI 640494. *Capsicum annuum* L.
Cultivar. "Punjab Lal"; PBC 148; Grif 15326. Collected in India. Cayenne type.

PI 640495. *Capsicum annuum* L.
Cultivar. "Lorai"; PBC 149; Grif 15327. Collected in Niger. Piquin type.

PI 640496. *Capsicum annuum* L.
Cultivar. "de Cayenne"; PBC 152; Grif 15328. Collected in Niger. Cayenne type.

PI 640497. *Capsicum annuum* L.
Cultivar. "Doux d'Espagne"; PBC 154; Grif 15329. Collected in Tunisia. Conical type.

PI 640498. *Capsicum annuum* L.
Cultivar. "Huaruar"; PBC 155; Grif 15330. Collected in Thailand. Cayenne type.

PI 640499. *Capsicum annuum* L.
Cultivar. "KKU Cluster"; PBC 156; Grif 15331. Collected in Thailand. Cayenne type.

PI 640500. *Capsicum annuum* L.
Cultivar. "Huay Sithon"; PBC 157; Grif 15332. Collected in Thailand. Cayenne type.

PI 640501. *Capsicum annuum* L.
Cultivar. "Yangjiao"; PBC 158; Grif 15333. Collected in Taiwan. Cayenne type.

PI 640502. *Capsicum annuum* L.
Cultivar. "Kilinochi"; PBC 161; Grif 15334. Collected in Sri Lanka. Cayenne type.

PI 640503. *Capsicum annuum* L.
Cultivar. "Redlands Sweet Sue"; PBC 163; Grif 15335. Collected in Australia. Wax type.

PI 640504. *Capsicum annuum* L.
Cultivar. "Line 16-3"; PBC 164; Grif 15336. Collected in Australia. Conibell type.

PI 640505. *Capsicum annuum* L.
Cultivar. "Acc. 1524"; PBC 165; Grif 15337. Collected in Australia. Piquin type.

PI 640506. *Capsicum annuum* L.
Cultivar. "RHRC"; PBC 166; Grif 15338. Collected in India. Cayenne type.

PI 640507. *Capsicum annuum* L.
Cultivar. "IIHR 1238"; PBC 167; Grif 15339. Collected in El Salvador. Cayenne type.

PI 640508. *Capsicum annuum* L.
Cultivar. "Calcutta Round #1"; PBC 168; Grif 15340. Collected in India. Cherry type.

PI 640509. *Capsicum annuum* L.
Cultivar. "PMR57/88k"; PBC 169; Grif 15341. Collected in India. Cayenne type.

PI 640510. *Capsicum annuum* L.
Cultivar. "Phule-C5"; PBC 170; Grif 15342. Collected in India. Cayenne type.

PI 640511. *Capsicum annuum* L.
Cultivar. "Salmon"; PBC 174; Grif 15343. Collected in Senegal. Cayenne type.

PI 640512. *Capsicum annuum* L.
Cultivar. "All Big"; PBC 176; Grif 15344. Collected in United States. Bell type.

PI 640513. *Capsicum annuum* L.
Cultivar. "C. ANNUUM 15201"; PBC 183; Grif 15345. Collected in Mexico. Cayenne type.

PI 640514. *Capsicum annuum* L.
Cultivar. "Gwanju"; PBC 185; Grif 15346. Collected in Korea, South. Cayenne type.

PI 640515. *Capsicum annuum* L.
Cultivar. "Cheongryong"; PBC 186; Grif 15347. Collected in Korea, South. Cayenne type.

PI 640516. *Capsicum annuum* L.
Cultivar. "Chicken Heart"; PBC 195; Grif 15348. Collected in Taiwan. Piquin type.

PI 640517. *Capsicum annuum* L.
Cultivar. PBC 198; Grif 15349. Collected in Thailand. Cayenne type.

PI 640518. *Capsicum annuum* L.
Cultivar. "Unknown Y22"; PBC 199; Grif 15350. Collected in Thailand. Cayenne type.

PI 640519. *Capsicum annuum* L.
Cultivar. PBC 200; Grif 15351. Collected in Thailand. Cayenne type.

PI 640520. *Capsicum annuum* L.
Cultivar. "Cili Langkap"; PBC 204; Grif 15352. Collected in Malaysia. Cayenne type.

PI 640521. *Capsicum annuum* L.
Cultivar. "Jinsol"; PBC 212; Grif 15353. Collected in Korea, South. Cayenne type.

PI 640522. *Capsicum annuum* L.
Cultivar. "Chongang"; PBC 213; Grif 15354. Collected in Korea, South. Cayenne type.

PI 640523. *Capsicum annuum* L.
Cultivar. "Hansol"; PBC 214; Grif 15355. Collected in Korea, South. Cayenne type.

PI 640524. *Capsicum annuum* L.
Cultivar. "Kymyong"; PBC 215; Grif 15356. Collected in Korea, South. Cayenne type.

PI 640525. *Capsicum annuum* L.
Cultivar. "Mubyungch"; PBC 216; Grif 15357. Collected in Korea, South. Cayenne type.

PI 640526. *Capsicum annuum* L.
Cultivar. "Kiho"; PBC 217; Grif 15358. Collected in Korea, South. Cayenne type.

PI 640527. *Capsicum annuum* L.
Cultivar. "Milord"; PBC 271; Grif 15359. Collected in France. Bell type.

PI 640528. *Capsicum annuum* L.
Cultivar. "ECW-20R (Bs2)"; PBC 273; Grif 15360. Collected in United States. Bell type.

PI 640529. *Capsicum annuum* L.
Cultivar. "ECW-10R (Bs1)"; PBC 274; Grif 15361. Collected in United States. Bell type.

PI 640530. *Capsicum annuum* L.
Cultivar. "ECW-30R (Bs3)"; PBC 276; Grif 15362. Collected in United States. Bell type.

PI 640531. *Capsicum annuum* L.
Cultivar. "XVR 3-25"; PBC 277; Grif 15363. Collected in United States. Bell type.

PI 640532. *Capsicum annuum* L.
Cultivar. "871076"; PBC 279; Grif 15364. Collected in Mexico. Small wax type.

PI 640533. *Capsicum annuum* L.
Cultivar. "P107"; PBC 285; Grif 15366. Collected in Taiwan. Bell type.

PI 640534. *Capsicum annuum* L.
Cultivar. "Szechwan 11"; PBC 287; Grif 15367. Collected in Taiwan. Cayenne type.

PI 640535. *Capsicum annuum* L.
Cultivar. "El Paso"; PBC 291; Grif 15368. Collected in United States. New Mexican type.

PI 640536. *Capsicum annuum* L.
Cultivar. "Cayenne Large Red Thick"; PBC 292; Grif 15369. Collected in United States. Cayenne type.

PI 640537. *Capsicum annuum* L.
Cultivar. "LF-1"; PBC 294; Grif 15370. Collected in Taiwan. Cayenne type.

PI 640538. *Capsicum annuum* L.
Cultivar. "88161"; PBC 299; Grif 15371. Collected in Mongolia. New Mexican type.

PI 640539. *Capsicum annuum* L.
Cultivar. "8812"; PBC 300; Grif 15372. Collected in Mongolia. New Mexican type.

PI 640540. *Capsicum annuum* L.
Cultivar. "Paprika#1"; PBC 305; Grif 15373. Collected in Malawi. Paprika type.

PI 640541. *Capsicum annuum* L.
Cultivar. "MC11"; PBC 307; Grif 15374. Collected in Malaysia. Cayenne type.

PI 640542. *Capsicum annuum* L.
Cultivar. "MC12"; PBC 308; Grif 15375. Collected in Malaysia. Cayenne type.

PI 640543. *Capsicum annuum* L.
Cultivar. "Chilli Klang"; PBC 309; Grif 15376. Collected in Malaysia. Cayenne type.

PI 640544. *Capsicum annuum* L.
Cultivar. "Chilli Merah"; PBC 311; Grif 15377. Collected in Malaysia. Cayenne type.

PI 640545. *Capsicum annuum* L.
Cultivar. "Rio Grande Chile"; PBC 312; Grif 15378. Collected in United States. Conical type.

PI 640546. *Capsicum annuum* L.
Cultivar. "CA-960 (Sindhur)"; PBC 313; Grif 15379. Collected in India. Cayenne type.

PI 640547. *Capsicum annuum* L.
Cultivar. "Hisar Vijay"; PBC 319; Grif 15381. Collected in India. Cayenne type.

PI 640548. *Capsicum annuum* L.
Cultivar. "Hisar Shakti"; PBC 321; Grif 15382. Collected in India. Cayenne type.

PI 640549. *Capsicum annuum* L.
Cultivar. "Bukit Gambir"; PBC 324; Grif 15383. Collected in Malaysia. Cayenne type.

PI 640550. *Capsicum annuum* L.
Cultivar. "Kawit"; PBC 325; Grif 15384. Collected in Philippines. Cayenne type.

PI 640551. *Capsicum annuum* L.
Cultivar. "Pichit"; PBC 327; Grif 15385. Collected in Thailand. New Mexican type.

PI 640552. *Capsicum annuum* L.
Cultivar. "Doux des Landes"; PBC 328; Grif 15386. Collected in France. Lamuyo, paprika type.

PI 640553. *Capsicum annuum* L.
Cultivar. "Tangerine Pimiento"; PBC 330; Grif 15387. Collected in United States. Pimento type.

PI 640554. *Capsicum annuum* L.
Cultivar. "Cayenne Chile"; PBC 332; Grif 15388. Collected in United States. Cayenne type.

PI 640555. *Capsicum annuum* L.
Cultivar. "Cubanelle"; PBC 344; Grif 15389. Collected in United States. Cubanelle type.

PI 640556. *Capsicum annuum* L.
Cultivar. "Serrano Vera Cruz HDV"; PBC 345; Grif 15390. Collected in Mexico. Serrano type.

PI 640557. *Capsicum annuum* L.
Cultivar. "Anaheim F-6"; PBC 348; Grif 15391. Collected in France. New Mexican type.

PI 640558. *Capsicum annuum* L.
Cultivar. "HDA 201"; PBC 350; Grif 15392. Collected in France. Cayenne type.

PI 640559. *Capsicum annuum* L.
Cultivar. "HDA 252"; PBC 351; Grif 15393. Collected in France. Cayenne type.

PI 640560. *Capsicum annuum* L.
Cultivar. "Phyo 636"; PBC 359; Grif 15394. Collected in Netherlands. Elong. bell type.

PI 640561. *Capsicum annuum* L.
Cultivar. "Kea Ryong San"; PBC 361; Grif 15395. Collected in Korea, South. Cayenne type.

PI 640562. *Capsicum annuum* L.
Cultivar. "Kunja"; PBC 362; Grif 15396. Collected in Korea, South. Cayenne type.

PI 640563. *Capsicum annuum* L.
Cultivar. PBC 364; Grif 15397. Collected in Italy. Conical type.

PI 640564. *Capsicum annuum* L.
Cultivar. PBC 367; Grif 15399. Collected in Sri Lanka. Keriting type.

PI 640565. *Capsicum annuum* L.
Cultivar. PBC 368; Grif 15400. Collected in Indonesia. Keriting type.

PI 640566. *Capsicum annuum* L.
Cultivar. PBC 369; Grif 15401. Collected in Indonesia. Cayenne type.

PI 640567. *Capsicum annuum* L.
Cultivar. "Keriting"; PBC 373; Grif 15405. Collected in Indonesia. Keriting type.

PI 640568. *Capsicum annuum* L.
Cultivar. "Jatilaba"; PBC 374; Grif 15406. Collected in Indonesia. Cayenne type.

PI 640569. *Capsicum annuum* L.
Cultivar. "Paris Minyak"; PBC 375; Grif 15407. Collected in Indonesia. Cayenne type.

PI 640570. *Capsicum annuum* L.
Cultivar. "Tit Super"; PBC 376; Grif 15408. Collected in Indonesia. Cayenne type.

PI 640571. *Capsicum annuum* L.
Cultivar. "Lv.1092"; PBC 377; Grif 15409. Collected in Indonesia. Cayenne type.

PI 640572. *Capsicum annuum* L.
Cultivar. "Cipanas"; PBC 378; Grif 15410. Collected in Indonesia. Cayenne type.

PI 640573. *Capsicum annuum* L.
Cultivar. "Tit Paris"; PBC 380; Grif 15411. Collected in Indonesia. Cayenne type.

PI 640574. *Capsicum annuum* L.
Cultivar. PBC 385; Grif 15414. Collected in Malaysia. Cayenne type.

PI 640575. *Capsicum annuum* L.
Cultivar. PBC 386; Grif 15415. Collected in Malaysia. Cayenne type.

PI 640576. *Capsicum annuum* L.
Cultivar. "Kulim"; PBC 387; Grif 15416. Collected in Malaysia. Cayenne type.

PI 640577. *Capsicum annuum* L.
Cultivar. PBC 389; Grif 15418. Collected in Malaysia. Cayenne type.

PI 640578. *Capsicum annuum* L.
Cultivar. PBC 393; Grif 15422. Collected in Taiwan. Bell type.

PI 640579. *Capsicum annuum* L.
Cultivar. "Shata Balady"; PBC 397; Grif 15423. Collected in Egypt. Cayenne type.

PI 640580. *Capsicum annuum* L.
Cultivar. "PI-2190"; PBC 403; Grif 15425. Collected in Nigeria. Cayenne type.

PI 640581. *Capsicum annuum* L.
Cultivar. "U-Kimba"; PBC 408; Grif 15429. Collected in Nigeria. Cayenne type.

PI 640582. *Capsicum annuum* L.
Cultivar. "UL-2190"; PBC 409; Grif 15430. Collected in Nigeria. Cayenne type.

PI 640583. *Capsicum annuum* L.
Cultivar. "TAM Mild Chile-2"; PBC 412; Grif 15431. Collected in United States. New Mexican type.

PI 640584. *Capsicum annuum* L.
Cultivar. "TAM Mild Jalapeno-1"; PBC 413; Grif 15432. Collected in United States. Jalapeno type.

PI 640585. *Capsicum annuum* L.
Cultivar. "Rio Grande Gold"; PBC 414; Grif 15433. Collected in United States. Small wax type.

PI 640586. *Capsicum annuum* L.
Cultivar. "YJ 81032"; PBC 416; Grif 15434. Collected in United States. Jalapeno type.

PI 640587. *Capsicum annuum* L.
Cultivar. "Ca 87067"; PBC 417; Grif 15435. Collected in United States. Cayenne type.

PI 640588. *Capsicum annuum* L.
Cultivar. "YCb 76105"; PBC 418; Grif 15436. Collected in United States. Cascabella type.

PI 640589. *Capsicum annuum* L.
Cultivar. "Balady"; PBC 425; Grif 15437. Collected in Egypt. Cayenne type.

PI 640590. *Capsicum annuum* L.
Cultivar. "DaChangNiuJiao Jiao"; PBC 426; Grif 15438. Collected in Taiwan. Cayenne type.

PI 640591. *Capsicum annuum* L.
Cultivar. "NuMex Eclipse"; PBC 427; Grif 15439. Collected in United States. New Mexican type.

PI 640592. *Capsicum annuum* L.
Cultivar. "NuMex Sunset"; PBC 428; Grif 15440. Collected in United States. New Mexican type.

PI 640593. *Capsicum annuum* L.
Cultivar. "NuMex Sunrise"; PBC 429; Grif 15441. Collected in United States. New Mexican type.

PI 640594. *Capsicum annuum* L.
Cultivar. "L-16"; PBC 430; Grif 15442. Collected in Hungary. Large wax type.

PI 640595. *Capsicum annuum* L.
Cultivar. "L-24"; PBC 431; Grif 15443. Collected in Hungary. Large wax type.

PI 640596. *Capsicum annuum* L.
Cultivar. "Sequeira Mendes"; PBC 436; Grif 15446. Collected in Portugal. Pimento type.

PI 640597. *Capsicum annuum* L.
Cultivar. "Goldstar"; PBC 439; Grif 15447. Collected in Netherlands. Bell type.

PI 640598. *Capsicum annuum* L.
Cultivar. "C. annuum 29"; PBC 444; Grif 15448. Collected in Mexico. Small wax type.

PI 640599. *Capsicum annuum* L.
Cultivar. "34-6-7-1-1-Bk"; PBC 446; Grif 15449. Collected in United States. Bell type.

PI 640600. *Capsicum annuum* L.
Cultivar. "75-3-4-4-1-Bk"; PBC 447; Grif 15450. Collected in United States. Bell type.

PI 640601. *Capsicum annuum* L.
Cultivar. "Cayenne Cajun 1A"; PBC 451; Grif 15451. Collected in United States. Cayenne type.

PI 640602. *Capsicum annuum* L.
Cultivar. "Cayenne Cajun 2A"; PBC 453; Grif 15453. Collected in United States. Cayenne type.

PI 640603. *Capsicum annuum* L.
Cultivar. PBC 454; Grif 15454. Collected in India. Cayenne type.

PI 640604. *Capsicum annuum* L.
Cultivar. PBC 455; Grif 15455. Collected in India. Cayenne type.

PI 640605. *Capsicum annuum* L.
Cultivar. "NP46A"; PBC 456; Grif 15456. Collected in India. Cayenne type.

PI 640606. *Capsicum annuum* L.
Cultivar. "Cascadura Ikeda"; PBC 457; Grif 15457. Collected in Brazil. Conibell type.

PI 640607. *Capsicum annuum* L.
Cultivar. "Nacional AG-506"; PBC 458; Grif 15458. Collected in Brazil. Conibell type.

PI 640608. *Capsicum annuum* L.
Cultivar. "KA-2"; PBC 460; Grif 15459. Collected in Sri Lanka. Cayenne type.

PI 640609. *Capsicum annuum* L.
Cultivar. "Mareko Fana"; PBC 464; Grif 15463. Collected in Ethiopia. Cayenne type.

PI 640610. *Capsicum annuum* L.
Cultivar. "Chaotiang-Jiao"; PBC 465; Grif 15464. Collected in China. Cayenne type.

PI 640611. *Capsicum annuum* L.
Cultivar. "Da-Tien jiao"; PBC 466; Grif 15465. Collected in China. Bell type.

PI 640612. *Capsicum annuum* L.
Cultivar. "Er fu tou (PM 815)"; PBC 467; Grif 15466. Collected in China. Cayenne type.

PI 640613. *Capsicum annuum* L.
Cultivar. "Erjintiao"; PBC 468; Grif 15467. Collected in China. Cayenne type.

PI 640614. *Capsicum annuum* L.
Cultivar. "Fudi-Jiao"; PBC 469; Grif 15468. Collected in China. Cayenne type.

PI 640615. *Capsicum annuum* L.
Cultivar. "Shanghai Jiamen-Jiao"; PBC 470; Grif 15469. Collected in China. Bell type.

PI 640616. *Capsicum annuum* L.
Cultivar. "Xian-Lajiao"; PBC 471; Grif 15470. Collected in China. Cayenne type.

PI 640617. *Capsicum annuum* L.
Cultivar. "Yangjiao-Lajiao"; PBC 472; Grif 15471. Collected in China. New Mexican type.

PI 640618. *Capsicum annuum* L.
Cultivar. PBC 473; Grif 15472. Collected in Indonesia. Cayenne type.

PI 640619. *Capsicum annuum* L.
Cultivar. "Rotan"; PBC 474; Grif 15473. Collected in Indonesia. Cayenne type.

PI 640620. *Capsicum annuum* L.
Cultivar. "Szechwan 13"; PBC 477; Grif 15474. Collected in Taiwan. Cayenne type.

PI 640621. *Capsicum annuum* L.
Cultivar. "ANK-22"; PBC 478; Grif 15475. Collected in Sri Lanka. Cayenne type.

PI 640622. *Capsicum annuum* L.
Cultivar. "ANK-72"; PBC 479; Grif 15476. Collected in Sri Lanka. Cayenne type.

PI 640623. *Capsicum annuum* L.
Cultivar. "ANK-101"; PBC 480; Grif 15477. Collected in Sri Lanka. Cayenne type.

PI 640624. *Capsicum annuum* L.
Cultivar. "Serrano Chili"; PBC 498; Grif 15487. Collected in Netherlands. Serrano type.

PI 640625. *Capsicum annuum* L.
Cultivar. "HDA 230"; PBC 503; Grif 15489. Collected in France. Cayenne type.

PI 640626. *Capsicum annuum* L.
Cultivar. "HDA 248"; PBC 504; Grif 15490. Collected in France. Cayenne type.

PI 640627. *Capsicum annuum* L.
Cultivar. "U276"; PBC 509; Grif 15493. Collected in Hungary. Cayenne type.

PI 640628. *Capsicum annuum* L.
Cultivar. "Long Fruit"; PBC 510; Grif 15494. Collected in Thailand. Cayenne type.

PI 640629. *Capsicum annuum* L.
Cultivar. "Long Fruit (A)"; PBC 511; Grif 15495. Collected in Thailand. Cayenne type.

PI 640630. *Capsicum annuum* L.
Cultivar. "Young Yang Jae Rae"; PBC 512; Grif 15496. Collected in Korea, South. Cayenne type.

PI 640631. *Capsicum annuum* L.
Cultivar. "Chil Gog Jae Lae"; PBC 513; Grif 15497. Collected in Korea, South. Cayenne type.

PI 640632. *Capsicum annuum* L.
Cultivar. "Eui Sung Jr"; PBC 514; Grif 15498. Collected in Korea, South. Cayenne type.

PI 640633. *Capsicum annuum* L.
Cultivar. "Je Chun Jr"; PBC 515; Grif 15499. Collected in Korea, South. Cayenne type.

PI 640634. *Capsicum annuum* L.
Cultivar. "HDA 249"; PBC 517; Grif 15501. Collected in France. Cayenne type.

PI 640635. *Capsicum annuum* L.
Cultivar. "Pusa Sadabahar"; PBC 518; Grif 15502. Collected in India. Cayenne type.

PI 640636. *Capsicum annuum* L.
Cultivar. "Serrano Tampiqueno"; PBC 523; Grif 15505. Collected in Mexico. Serrano type.

PI 640637. *Capsicum annuum* L.
Cultivar. "Serrano Huasteco"; PBC 524; Grif 15506. Collected in Mexico. Serrano type.

PI 640638. *Capsicum annuum* L.
Cultivar. "AR 89"; PBC 529; Grif 15511. Collected in Italy. Bell type.

PI 640639. *Capsicum annuum* L.
Cultivar. "LAB 469"; PBC 530; Grif 15512. Collected in Italy. Conical type.

PI 640640. *Capsicum annuum* L.
Cultivar. "Tumpang"; PBC 534; Grif 15514. Collected in Indonesia. Cayenne type.

PI 640641. *Capsicum annuum* L.
Cultivar. "IR"; PBC 535; Grif 15515. Collected in Indonesia. Cayenne type.

PI 640642. *Capsicum annuum* L.
Cultivar. PBC 539; Grif 15516. Cayenne type.

PI 640643. *Capsicum annuum* L.
Cultivar. "Adra"; PBC 540; Grif 15517. Collected in France. Fresno type.

PI 640644. *Capsicum annuum* L.
Cultivar. "NuMex Conquistador"; PBC 437; Grif 15518. Collected in United States. New Mexican type.

PI 640645. *Capsicum annuum* L.
Cultivar. "Lv. 2722"; PBC 549; Grif 15520. Collected in Indonesia. Cayenne type.

PI 640646. *Capsicum annuum* L.
Cultivar. "Lv. 1592"; PBC 550; Grif 15521. Collected in Indonesia. Cayenne type.

PI 640647. *Capsicum annuum* L.
Cultivar. "Beldi"; PBC 551; Grif 15522. Collected in Tunisia. Cayenne type.

PI 640648. *Capsicum annuum* L.
Cultivar. "Fyuco"; PBC 553; Grif 15524. Collected in Argentina. Bell type.

PI 640649. *Capsicum annuum* L.
Cultivar. "Calatauco"; PBC 554; Grif 15525. Collected in Argentina. Pimento type.

PI 640650. *Capsicum annuum* L.
Cultivar. "1989-24 Cap 8608-PeMV"; PBC 568; Grif 15530. Collected in United States. Cayenne type.

PI 640651. *Capsicum annuum* L.
Cultivar. PBC 572; Grif 15534. Collected in Italy. Cayenne type.

PI 640652. *Capsicum annuum* L.
Cultivar. PBC 577; Grif 15535. Collected in Sri Lanka. Bell type.

PI 640653. *Capsicum annuum* L.
Cultivar. PBC 579; Grif 15536. Collected in Sri Lanka. Cayenne type.

PI 640654. *Capsicum annuum* L.
Cultivar. "Ruhunu Miris"; PBC 583; Grif 15540. Collected in Sri Lanka. Cayenne type.

PI 640655. *Capsicum annuum* L.
Cultivar. PBC 587; Grif 15544. Collected in Thailand. Cayenne type.

PI 640656. *Capsicum annuum* L.
Cultivar. PBC 592; Grif 15549. Collected in Thailand. Cayenne type.

PI 640657. *Capsicum annuum* L.
Cultivar. PBC 594; Grif 15551. Collected in Thailand. Cayenne type.

PI 640658. *Capsicum annuum* L.
Cultivar. "Luang"; PBC 596; Grif 15553. Collected in Thailand. Cayenne type.

PI 640659. *Capsicum annuum* L.
Cultivar. "Mun"; PBC 597; Grif 15554. Collected in Thailand. Cayenne type.

PI 640660. *Capsicum annuum* L.
Cultivar. "Num"; PBC 598; Grif 15555. Collected in Thailand. Cayenne type.

PI 640661. *Capsicum annuum* L.
Cultivar. "Unknown 6"; PBC 599; Grif 15556. Collected in Thailand. Cayenne type.

PI 640662. *Capsicum annuum* L.
Cultivar. PBC 601; Grif 15558. Collected in Taiwan. Cayenne type.

PI 640663. *Capsicum annuum* L.
Cultivar. PBC 602; Grif 15559. Collected in Taiwan. Cayenne type.

PI 640664. *Capsicum annuum* L.
Cultivar. "Hi Fong No. 2"; PBC 609; Grif 15560. Collected in China. Bell type.

PI 640665. *Capsicum annuum* L.
Cultivar. "Prapadaeng"; PBC 613; Grif 15562. Collected in Thailand. Cayenne type.

PI 640666. *Capsicum annuum* L.
Cultivar. "Matikas"; PBC 615; Grif 15563. Collected in Philippines. Cayenne type.

PI 640667. *Capsicum annuum* L.
Cultivar. PBC 622; Grif 15565. Collected in Taiwan. Cayenne type.

PI 640668. *Capsicum annuum* L.
Cultivar. "HDA 103"; PBC 625; Grif 15567. Collected in France. Cayenne type.

PI 640669. *Capsicum annuum* L.
Cultivar. "LP 1"; PBC 626; Grif 15568. Collected in France. Conical type.

PI 640670. *Capsicum annuum* L.
Cultivar. "Singh 4"; PBC 629; Grif 15569. Collected in India. Cayenne type.

PI 640671. *Capsicum annuum* L.
Cultivar. "CA 8"; PBC 631; Grif 15570. Collected in Sri Lanka. Large wax type.

PI 640672. *Capsicum annuum* L.
Cultivar. PBC 632; Grif 15571. Collected in Bangladesh. Cayenne type.

PI 640673. *Capsicum annuum* L.
Cultivar. "Wanni Miris 01013"; PBC 634; Grif 15573. Collected in Sri Lanka. Conical type.

PI 640674. *Capsicum annuum* L.
Cultivar. "Galkunda Miris 01146"; PBC 636; Grif 15574. Collected in Sri Lanka. Cayenne type.

PI 640675. *Capsicum annuum* L.
Cultivar. "Fresno"; PBC 642; Grif 15576. Collected in Kenya. Fresno type.

PI 640676. *Capsicum annuum* L.
Cultivar. "Athi Slim"; PBC 643; Grif 15577. Collected in Kenya. Cayenne type.

PI 640677. *Capsicum annuum* L.
Cultivar. "Jeju"; PBC 648; Grif 15579. Collected in Korea, South. Cayenne type.

PI 640678. *Capsicum annuum* L.
Cultivar. "Sinagtala"; PBC 650; Grif 15580. Collected in Philippines. Fresno type.

PI 640679. *Capsicum annuum* L.
Cultivar. "Hungarian Yellow Wax"; PBC 653; Grif 15583. Collected in United States. Large wax type.

PI 640680. *Capsicum annuum* L.
Cultivar. PBC 656; Grif 15584. Collected in Thailand. Cayenne type.

PI 640681. *Capsicum annuum* L.
Cultivar. "Chong Chao No. 22"; PBC 657; Grif 15585. Collected in China. Cayenne type.

PI 640682. *Capsicum annuum* L.
Cultivar. PBC 661; Grif 15586. Collected in Tanzania. Cayenne type.

PI 640683. *Capsicum annuum* L.
Cultivar. PBC 662; Grif 15587. Collected in Tanzania. Piquin type.

PI 640684. *Capsicum annuum* L.
Cultivar. "Sapporo Taichou Nanban"; PBC 672; Grif 15588. Collected in Japan. Cayenne type.

PI 640685. *Capsicum annuum* L.
Cultivar. "Lipstick"; PBC 674; Grif 15589. Collected in United States. Conical type.

PI 640686. *Capsicum annuum* L.
Cultivar. "Corona"; PBC 675; Grif 15590. Collected in United States. Conical type.

PI 640687. *Capsicum annuum* L.
Cultivar. "Italia"; PBC 677; Grif 15591. Collected in United States. Conical type.

PI 640688. *Capsicum annuum* L.
Cultivar. "Cherrytime"; PBC 678; Grif 15592. Collected in United States. Cherry type.

PI 640689. *Capsicum annuum* L.
Cultivar. "Montego"; PBC 680; Grif 15594. Conical type.

PI 640690. *Capsicum annuum* L.
Cultivar. "Early Jalapeno"; PBC 681; Grif 15595. Collected in United States. Jalapeno type.

PI 640691. *Capsicum annuum* L.
Cultivar. "CAB"; PBC 682; Grif 15596. Collected in Sri Lanka. Elong. bell type.

PI 640692. *Capsicum annuum* L.
Cultivar. "Margareth"; PBC 691; Grif 15598. Collected in Brazil. Elong. bell type.

PI 640693. *Capsicum annuum* L.
Cultivar. "Azeth"; PBC 692; Grif 15599. Collected in Brazil. Cayenne type.

PI 640694. *Capsicum annuum* L.
Cultivar. "Magda"; PBC 693; Grif 15600. Collected in Brazil. Elong. bell type.

PI 640695. *Capsicum annuum* L.
Cultivar. "Pusa Jwala"; PBC 715; Grif 15604. Collected in India. Cayenne type.

PI 640696. *Capsicum annuum* L.
Cultivar. "Prakash"; PBC 718; Grif 15607. Collected in India. Cayenne type.

PI 640697. *Capsicum annuum* L.
Cultivar. "Arka Lohit"; PBC 719; Grif 15608. Collected in India. Cayenne type.

PI 640698. *Capsicum annuum* L.
Cultivar. PBC 725; Grif 15609. Collected in Papua New Guinea. Cayenne type.

PI 640699. Capsicum annuum L.
Cultivar. "Elefantormany"; PBC 728; Grif 15611. Collected in Hungary. Large wax type.

PI 640700. Capsicum annuum L.
Cultivar. "Lueng 1"; PBC 732; Grif 15612. Collected in Thailand. Cayenne type.

PI 640701. Capsicum annuum L.
Cultivar. "Chinda 1"; PBC 742; Grif 15613. Collected in Thailand. Cayenne type.

PI 640702. Capsicum annuum L.
Cultivar. "Chinda 2"; PBC 743; Grif 15614. Collected in Thailand. Cayenne type.

PI 640703. Capsicum annuum L.
Cultivar. "Altamira"; PBC 744; Grif 15615. Collected in Mexico. Jalapeno type.

PI 640704. Capsicum annuum L.
Cultivar. "Tabaquero"; PBC 747; Grif 15617. Collected in Mexico. Tabasco type.

PI 640705. Capsicum annuum L.
Cultivar. "Szeged 40017"; PBC 750; Grif 15618. Collected in Hungary. Paprika type.

PI 640706. Capsicum annuum L.
Cultivar. "ET Burai/2696"; PBC 752; Grif 15619. Collected in Hungary. Large wax type.

PI 640707. Capsicum annuum L.
Cultivar. "U 339/754"; PBC 757; Grif 15624. Collected in Hungary. Large wax type.

PI 640708. Capsicum annuum L.
Cultivar. "TH 122"; PBC 760; Grif 15625. Collected in Hungary. Large wax type.

PI 640709. Capsicum annuum L.
Cultivar. "ET 2052/2318"; PBC 761; Grif 15626. Collected in Hungary. Large wax type.

PI 640710. Capsicum annuum L.
Cultivar. "U 1424/1097"; PBC 763; Grif 15628. Collected in Hungary. Large wax type.

PI 640711. Capsicum annuum L.
Cultivar. PBC 767; Grif 15631. Collected in Hungary. Small wax type.

PI 640712. Capsicum annuum L.
Cultivar. PBC 768; Grif 15632. Collected in Hungary. Small wax type.

PI 640713. Capsicum annuum L.
Cultivar. "Cin Giallo"; PBC 774; Grif 15635. Collected in Italy. Elong. bell type.

PI 640714. *Capsicum annuum* L.
Cultivar. "Albaregia"; PBC 778; Grif 15638. Collected in Hungary. Large wax type.

PI 640715. *Capsicum annuum* L.
Cultivar. "T 52"; PBC 779; Grif 15639. Collected in Hungary. Large wax type.

PI 640716. *Capsicum annuum* L.
Cultivar. "Feherozon"; PBC 781; Grif 15640. Collected in Hungary. Large wax type.

PI 640717. *Capsicum annuum* L.
Cultivar. "Tizenegyes"; PBC 782; Grif 15641. Collected in Hungary. Large wax type.

PI 640718. *Capsicum annuum* L.
Cultivar. "Suptol"; PBC 783; Grif 15642. Collected in Hungary. Large wax type.

PI 640719. *Capsicum annuum* L.
Cultivar. "Fecske"; PBC 784; Grif 15643. Collected in Hungary. Large wax type.

PI 640720. *Capsicum annuum* L.
Cultivar. "Riquel"; PBC 791; Grif 15645. Collected in Italy. Pimento type.

PI 640721. *Capsicum annuum* L.
Cultivar. "ISE"; PBC 796; Grif 15646. Collected in Japan. Campanulate type.

PI 640722. *Capsicum annuum* L.
Cultivar. "Mie-Midori"; PBC 797; Grif 15647. Collected in Japan. Campanulate type.

PI 640723. *Capsicum annuum* L.
Cultivar. "Shishitou"; PBC 800; Grif 15649. Collected in Japan. Campanulate type.

PI 640724. *Capsicum annuum* L.
Cultivar. PBC 804; Grif 15650. Collected in Myanmar. Cayenne type.

PI 640725. *Capsicum annuum* L.
Cultivar. PBC 806; Grif 15651. Collected in China. Cayenne type.

PI 640726. *Capsicum annuum* L.
Cultivar. "NuMex Bailey Piquin"; PBC 807; Grif 15652. Collected in United States. Piquin type.

PI 640727. *Capsicum annuum* L.
Cultivar. "Bulgaria Huang Piy Ang"; PBC 809; Grif 15653. Collected in China. Cayenne type.

PI 640728. *Capsicum annuum* L.
Cultivar. "Bathinda Selection 1-7"; PBC 821; Grif 15655. Collected in India. Cayenne type.

PI 640729. *Capsicum annuum* L.
Cultivar. "Bathinda Selection 1-1"; PBC 822; Grif 15656. Collected in India. Cayenne type.

PI 640730. *Capsicum annuum* L.
Cultivar. "Volcani Center 12567"; PBC 825; Grif 15658. Collected in Israel. Lamuyo type.

PI 640731. *Capsicum annuum* L.
Cultivar. "Volcani Center 12568"; PBC 826; Grif 15659. Collected in Israel. Lamuyo type.

PI 640732. *Capsicum annuum* L.
Cultivar. "Cayenne Long Slim"; PBC 827; Grif 15660. Collected in United States. Cayenne type.

PI 640733. *Capsicum annuum* L.
Cultivar. "Papri Queen"; PBC 828; Grif 15661. Collected in United States . New Mexican type.

PI 640734. *Capsicum annuum* L.
Cultivar. "Bangchang"; PBC 830; Grif 15662. Collected in Thailand. Cayenne type.

PI 640735. *Capsicum annuum* L.
Cultivar. "Gosung"; PBC 833; Grif 15663. Collected in Korea, South. Cayenne type.

PI 640736. *Capsicum annuum* L.
Cultivar. PBC 840; Grif 15665. Collected in United States. Minibell type.

PI 640737. *Capsicum annuum* L.
Cultivar. PBC 841; Grif 15666. Collected in United States. Minibell type.

PI 640738. *Capsicum annuum* L.
Cultivar. PBC 842; Grif 15667. Collected in United States. Bell type.

PI 640739. *Capsicum annuum* L.
Cultivar. "B 37"; PBC 845; Grif 15670. Collected in United States. Bell type.

PI 640740. *Capsicum annuum* L.
Cultivar. "B 78"; PBC 848; Grif 15673. Collected in United States. Bell type.

PI 640741. *Capsicum annuum* L.
Cultivar. "Rama"; PBC 852; Grif 15674. Collected in Nicaragua. Piquin type.

PI 640742. *Capsicum annuum* L.
Cultivar. PBC 865; Grif 15676. Collected in China. Cayenne type.

PI 640743. *Capsicum annuum* L.
Cultivar. PBC 867; Grif 15677. Collected in Taiwan. Cayenne type.

PI 640744. *Capsicum annuum* L.
Cultivar. "Weonkyo 306"; PBC 869; Grif 15678. Collected in Japan. Cayenne type.

PI 640745. *Capsicum annuum* L.
Cultivar. "Baramashi"; PBC 870; Grif 15679. Collected in Japan. Cayenne type.

PI 640746. *Capsicum annuum* L.
Cultivar. "90C40"; PBC 873; Grif 15681. Collected in United States. Piquin type.

PI 640747. *Capsicum annuum* L.
Cultivar. "90C44"; PBC 874; Grif 15682. Collected in United States. Piquin type.

PI 640748. *Capsicum annuum* L.
Cultivar. "90C53"; PBC 875; Grif 15683. Collected in United States. Piquin type.

PI 640749. *Capsicum annuum* L.
Cultivar. "KAU Cluster"; PBC 876; Grif 15684. Collected in India. Cayenne type.

PI 640750. *Capsicum annuum* L.
Cultivar. PBC 881; Grif 15685. Collected in Australia. Piquin type.

PI 640751. *Capsicum annuum* L.
Cultivar. PBC 882; Grif 15686. Collected in Vietnam. Cayenne type.

PI 640752. *Capsicum annuum* L.
Cultivar. PBC 883; Grif 15687. Collected in Vietnam. Piquin type.

PI 640753. *Capsicum annuum* L.
Cultivar. PBC 884; Grif 15688. Collected in Thailand. Piquin type.

PI 640754. *Capsicum annuum* L.
Cultivar. "Z-Dakawa"; PBC 888; Grif 15689. Collected in Tanzania. Cayenne type.

PI 640755. *Capsicum annuum* L.
Cultivar. PBC 889; Grif 15690. Collected in Tanzania. Cayenne type.

PI 640756. *Capsicum annuum* L.
Cultivar. PBC 891; Grif 15691. Collected in Ethiopia. Cayenne type.

PI 640757. *Capsicum annuum* L.
Cultivar. PBC 893; Grif 15692. Collected in Tanzania. Cayenne type.

PI 640758. *Capsicum annuum* L.
Cultivar. PBC 894; Grif 15693. Collected in Tanzania. Cayenne type.

PI 640759. *Capsicum annuum* L.
Cultivar. PBC 895; Grif 15694. Collected in Tanzania. Cayenne type.

PI 640760. *Capsicum annuum* L.
Cultivar. PBC 896; Grif 15695. Collected in Tanzania. Cayenne type.

PI 640761. *Capsicum annuum* L.
Cultivar. PBC 897; Grif 15696. Collected in Tanzania. Cayenne type.

PI 640762. *Capsicum annuum* L.
Cultivar. "Buyango 2"; PBC 899; Grif 15698. Collected in Tanzania. Cayenne type.

PI 640763. *Capsicum annuum* L.
Cultivar. "Bangalore 1"; PBC 900; Grif 15699. Collected in India. Cayenne type.

PI 640764. *Capsicum annuum* L.
Cultivar. "Bangalore 2"; PBC 901; Grif 15700. Collected in India. Cayenne type.

PI 640765. *Capsicum annuum* L.
Cultivar. PBC 902; Grif 15701. Collected in India. Cayenne type.

PI 640766. *Capsicum annuum* L.
Cultivar. PBC 903; Grif 15702. Collected in India. Cherry type.

PI 640767. *Capsicum annuum* L.
Cultivar. "Kaswaswa 1"; PBC 904; Grif 15703. Collected in Tanzania. Cayenne type.

PI 640768. *Capsicum annuum* L.
Cultivar. "Kaswaswa 2"; PBC 905; Grif 15704. Cayenne type.

PI 640769. *Capsicum annuum* L.
Cultivar. "Buyango"; PBC 908; Grif 15706. Collected in Tanzania. Cayenne type.

PI 640770. *Capsicum annuum* L.
Cultivar. PBC 923; Grif 15707. Collected in Uganda. Cayenne type.

PI 640771. *Capsicum annuum* L.
Cultivar. "Nong Ler"; PBC 927; Grif 15709. Collected in China. Bell type.

PI 640772. *Capsicum annuum* L.
Cultivar. "Nong Da No. 8"; PBC 928; Grif 15710. Collected in China. Bell type.

PI 640773. *Capsicum annuum* L.
Cultivar. "137-25-5-BK-8-2@"; PBC 929; Grif 15711. Collected in United States. Bell type.

PI 640774. *Capsicum annuum* L.
Cultivar. "Hot Portugal"; PBC 930; Grif 15712. Collected in United States. Cayenne type.

PI 640775. *Capsicum annuum* L.
Cultivar. "59-5"; PBC 938; Grif 15713. Collected in Tanzania. Bell type.

PI 640776. *Capsicum annuum* L.
Cultivar. "Narva"; PBC 941; Grif 15715. Collected in Grenada. Elong. bell type.

PI 640777. *Capsicum annuum* L.
Cultivar. PBC 942; Grif 15716. Collected in Taiwan. Conical type.

PI 640778. *Capsicum annuum* L.
Cultivar. "NuMex Joe E. Parker"; PBC 943; Grif 15717. Collected in United States. Cayenne type.

PI 640779. *Capsicum annuum* L.
Cultivar. "Kaala"; PBC 944; Grif 15718. Collected in United States. Elong. bell type.

PI 640780. *Capsicum annuum* L.
Cultivar. "Waialua"; PBC 945; Grif 15719. Collected in United States. Cayenne type.

PI 640781. *Capsicum annuum* L.
Cultivar. "Surya Mukhi"; PBC 947; Grif 15720. Collected in Nepal. Cayenne type.

PI 640782. *Capsicum annuum* L.
Cultivar. "Yatsufusa"; PBC 948; Grif 15721. Collected in Nepal. Cayenne type.

PI 640783. *Capsicum annuum* L.
Cultivar. "Sha Ema"; PBC 950; Grif 15722. Collected in Bhutan. Cayenne type.

PI 640784. *Capsicum annuum* L.
Cultivar. "Longhi"; PBC 962; Grif 15723. Collected in Pakistan. Cayenne type.

PI 640785. *Capsicum annuum* L.
Cultivar. "Narwala"; PBC 963; Grif 15724. Collected in Pakistan. Cayenne type.

PI 640786. *Capsicum annuum* L.
Cultivar. "Kulai"; PBC 972; Grif 15725. Collected in Malaysia. Cayenne type.

PI 640787. *Capsicum annuum* L.
Cultivar. "Chilli Cabai"; PBC 973; Grif 15726. Collected in Malaysia. Cayenne type.

PI 640788. *Capsicum annuum* L.
Cultivar. PBC 977; Grif 15728. Collected in Israel. Cayenne type.

PI 640789. *Capsicum annuum* L.
Cultivar. PBC 984; Grif 15729. Collected in Israel. Elong. bell type.

PI 640790. *Capsicum annuum* L.
Cultivar. PBC 987; Grif 15730. Collected in Israel. Bell type.

PI 640791. *Capsicum annuum* L.
Cultivar. PBC 990; Grif 15731. Collected in Egypt. Cayenne type.

PI 640792. *Capsicum annuum* L.
Cultivar. PBC 992; Grif 15732. Collected in Israel. Piquin type.

PI 640793. *Capsicum annuum* L.
Cultivar. "Fips"; PBC 993; Grif 15733. Collected in Netherlands. Piquin type.

PI 640794. *Capsicum annuum* L.
Cultivar. PBC 994; Grif 15734. Collected in Israel. Cayenne type.

PI 640795. *Capsicum annuum* L.
Cultivar. PBC 998; Grif 15735. Collected in Brazil. Piquin type.

PI 640796. *Capsicum annuum* L.
Cultivar. "Anaheim TMR"; PBC 999; Grif 15736. Collected in United States. New Mexican type.

PI 640797. *Capsicum annuum* L.
Cultivar. "Large Cherry"; PBC1000; Grif 15737. Collected in United States. Cherry type.

PI 640798. *Capsicum annuum* L.
Cultivar. "Taitos"; PBC1051; Grif 15738. Collected in Hungary. Wax type.

PI 640799. *Capsicum annuum* L.
Cultivar. "Spanish High Hue"; PBC1057; Grif 15739. Collected in United States. Wax type.

PI 640800. *Capsicum annuum* L.
Cultivar. "KV269-1"; PBC1315; Grif 15741. Collected in United States. Large wax type.

PI 640801. *Capsicum annuum* L.
Cultivar. "KV273-1"; PBC1316; Grif 15742. Collected in United States. Wax type.

PI 640802. *Capsicum annuum* L.
Cultivar. "Jin #2"; PBC1328; Grif 15743. Collected in Taiwan. Cherry type.

PI 640803. *Capsicum annuum* L.
Cultivar. "Red Hot"; PBC1329; Grif 15744. Collected in Philippines. Cayenne type.

PI 640804. *Capsicum annuum* L.
Cultivar. "R1-26(17)"; PBC1347; Grif 15746. Collected in Malaysia. Cayenne type.

The following were developed by Asian Vegetable Research and Development Center, P.O. Box 42, Shanhua, Tainan, Taiwan. Received 01/25/1999.

PI 640805. Capsicum annuum L.
Cultivar. "Unknown 41"; PBC1348; Grif 15747. Collected in Thailand. Cayenne type.

PI 640806. Capsicum annuum L.
Cultivar. "Cegledi 6 t.f."; PBC1349; Grif 15748. Collected in Hungary. Large wax type.

The following were donated by Asian Vegetable Research and Development Center, P.O. Box 42, Shanhua, Tainan, Taiwan. Received 01/25/1999.

PI 640807. Capsicum annuum L.
Cultivar. "King Gum Go Chu"; PBC1350; Grif 15749. Collected in Korea, South. Cayenne type.

PI 640808. Capsicum annuum L.
Cultivar. PBC1352; Grif 15750. Collected in Italy. Cayenne type.

PI 640809. Capsicum annuum L.
Cultivar. PBC1353; Grif 15751. Collected in Denmark. Cayenne type.

PI 640810. Capsicum annuum L.
Cultivar. "Cheong Yang"; PBC1357; Grif 15752. Collected in Korea, South. Cayenne type.

PI 640811. Capsicum annuum L.
Cultivar. "Corbedziyiski"; PBC1363; Grif 15753. Collected in Bulgaria. Cayenne type.

PI 640812. Capsicum annuum L.
Cultivar. "Orias Kossarvu"; PBC1367; Grif 15754. Collected in Hungary. Cayenne type.

PI 640813. Capsicum annuum L.
Cultivar. PBC1379; Grif 15757. Collected in Cuba. Piquin type.

PI 640814. Capsicum annuum L.
Cultivar. "Astrachanskij 628"; PBC1382; Grif 15759. Collected in Russian Federation. Cayenne type.

PI 640815. Capsicum annuum L.
Cultivar. PBC1384; Grif 15761. Collected in Zambia. Cayenne type.

PI 640816. Capsicum annuum L.
Cultivar. PBC1385; Grif 15762. Collected in Egypt. Fresno type.

PI 640817. Capsicum annuum L.
Cultivar. PBC1404; Grif 15763. Collected in Syria. Cayenne type.

PI 640818. Capsicum annuum L.
Cultivar. "Hot Shot"; PBC1406; Grif 15764. Collected in Philippines. Cayenne type.

PI 640819. Capsicum annuum L.
Cultivar. "Arka Gauray"; PBC1412; Grif 15765. Collected in India. Bell

type.

PI 640820. Capsicum annuum L.
Cultivar. "Sariab #1"; PBC1414; Grif 15766. Cayenne type.

PI 640821. Capsicum annuum L.
Cultivar. "Sariab #2"; PBC1415; Grif 15767. Collected in Pakistan. Cayenne type.

PI 640822. Capsicum annuum L.
Cultivar. "Sariab #3"; PBC1416; Grif 15768. Collected in Pakistan. Cayenne type.

PI 640823. Capsicum annuum L.
Cultivar. "Pasilla de Oaxaca"; PBC1428; Grif 15770. Collected in Mexico. Pasilla type.

PI 640824. Capsicum annuum L.
Cultivar. "NuMex Barker's Hot"; PBC1432; Grif 15774. Collected in United States. New Mexican type.

PI 640825. Capsicum annuum L.
Cultivar. "Charleston Hot"; PBC1433; Grif 15775. Collected in United States. Cayenne type.

PI 640826. Capsicum annuum L.
Cultivar. "Achar"; PBC1434; Grif 15776. Collected in India. Cayenne type.

PI 640827. Capsicum annuum L.
Cultivar. "Agni Sikha II"; PBC1435; Grif 15777. Collected in India. Cayenne type.

PI 640828. Capsicum annuum L.
Cultivar. "Albino White Bullnose"; PBC1438; Grif 15778. Collected in United States. Minibell type.

PI 640829. Capsicum annuum L.
Cultivar. "Ancho Mulato"; PBC1439; Grif 15779. Collected in Mexico. Poblano type.

PI 640830. Capsicum annuum L.
Cultivar. "Black Dallas"; PBC1440; Grif 15780. Collected in United States. Cayenne type.

PI 640831. Capsicum annuum L.
Cultivar. "Bouquet"; PBC1441; Grif 15781. Collected in United States. Ornamental type.

PI 640832. Capsicum annuum L.
Cultivar. "Canada Cheese"; PBC1442; Grif 15782. Collected in Canada. Cherry type.

PI 640833. Capsicum annuum L.
Cultivar. "Cascabella"; PBC1444; Grif 15783. Collected in United States. Cascabella type.

PI 640834. *Capsicum annuum* L.
Cultivar. "Cayenne Ultra"; PBC1445; Grif 15784. Collected in United States. Cayenne type.

PI 640835. *Capsicum annuum* L.
Cultivar. "Centennial"; PBC1446; Grif 15785. Collected in United States. Ornamental type.

PI 640836. *Capsicum annuum* L.
Cultivar. "Chamborate"; PBC1447; Grif 15786. Collected in United States. Conical type.

PI 640837. *Capsicum annuum* L.
Cultivar. "Chi Chien"; PBC1448; Grif 15787. Collected in United States. Cayenne type.

PI 640838. *Capsicum annuum* L.
Cultivar. "Chilaca"; PBC1449; Grif 15788. Collected in Mexico. Pasilla type.

PI 640839. *Capsicum annuum* L.
Cultivar. "Chile Negro"; PBC1450; Grif 15789. Collected in Mexico. Pasilla type.

PI 640840. *Capsicum annuum* L.
Cultivar. "Choco"; PBC1452; Grif 15790. Collected in United States. Conical type.

PI 640841. *Capsicum annuum* L.
Cultivar. "Chocolate Cherry"; PBC1453; Grif 15791. Collected in United States. Cherry type.

PI 640842. *Capsicum annuum* L.
Cultivar. "Coban"; PBC1454; Grif 15792. Collected in United States. Piquin type.

PI 640843. *Capsicum annuum* L.
Cultivar. "Cochiti"; PBC1455; Grif 15793. Collected in United States. Conical type.

PI 640844. *Capsicum annuum* L.
Cultivar. "Corbaci type"; PBC1456; Grif 15794. Collected in United States. Cayenne type.

PI 640845. *Capsicum annuum* L.
Cultivar. "Cow Horn"; PBC1457; Grif 15795. Collected in United States. Cayenne type.

PI 640846. *Capsicum annuum* L.
Cultivar. "Dunso"; PBC1458; Grif 15796. Collected in United States. Cayenne type.

PI 640847. *Capsicum annuum* L.
Cultivar. "Fire"; PBC1460; Grif 15797. Collected in United States. Serrano type.

PI 640848. *Capsicum annuum* L.
Cultivar. "Firecracker"; PB1461; Grif 15798. Collected in United States. Ornamental type.

PI 640849. *Capsicum annuum* L.
Cultivar. "Golden Cayenne"; PBC1463; Grif 15799. Collected in United States. Cayenne type.

PI 640850. *Capsicum annuum* L.
Cultivar. "Hot Claw"; PBC1465; Grif 15800. Collected in United States. Cayenne type.

PI 640851. *Capsicum annuum* L.
Cultivar. "Italian Green Frying"; PBC1466; Grif 15801. Collected in United States. New Mexican type.

PI 640852. *Capsicum annuum* L.
Cultivar. "Malahat"; PBC1472; Grif 15803. Collected in United States. Cayenne type.

PI 640853. *Capsicum annuum* L.
Cultivar. "Merah"; PBC1474; Grif 15804. Collected in United States. Cayenne type.

PI 640854. *Capsicum annuum* L.
Cultivar. "Mexican Red Hot"; PBC1475; Grif 15805. Collected in United States. Cayenne type.

PI 640855. *Capsicum annuum* L.
Cultivar. "Mulato Isleno"; PBC1476; Grif 15806. Collected in United States. Ancho type.

PI 640856. *Capsicum annuum* L.
Cultivar. "Purple Delight"; PBC1493; Grif 15808. Collected in United States. Ornamental type.

PI 640857. *Capsicum annuum* L.
Cultivar. "Quadrato de Oro"; PBC1484; Grif 15809. Collected in Netherlands. Bell type.

PI 640858. *Capsicum annuum* L.
Cultivar. "Russian"; PBC1492; Grif 15814. Collected in Russian Federation. Cayenne type.

PI 640859. *Capsicum annuum* L.
Cultivar. "Short Afghan"; PBC1494; Grif 15815. Collected in United States. Cayenne type.

PI 640860. *Capsicum annuum* L.
Cultivar. "Spanish Spice"; PBC1496; Grif 15817. Collected in United States. New Mexican type.

PI 640861. *Capsicum annuum* L.
Cultivar. "Numex Sunburst"; PBC1497; Grif 15818. Collected in United States. de Arbol type.

PI 640862. *Capsicum annuum* L.
Cultivar. "Numex Sunflare"; PBC1498; Grif 15819. Collected in United States. de Arbol type.

PI 640863. *Capsicum annuum* L.
Cultivar. "Numex Sunglo"; PBC1499; Grif 15820. Collected in United States. de Arbol type.

PI 640864. *Capsicum annuum* L.
Cultivar. "Tiny Samoa"; PBC1501; Grif 15821. Collected in United States. Ornamental type.

PI 640865. *Capsicum annuum* L.
Cultivar. "Twilight"; PBC1503; Grif 15822. Collected in United States. Ornamental type.

PI 640866. *Capsicum annuum* L.
Cultivar. "Yung Ko"; PBC1507; Grif 15823. Collected in United States. Cayenne type.

PI 640867. *Capsicum annuum* L.
Cultivar. "Anaheim M"; PBC1512; Grif 15824. Collected in United States. New Mexican type.

PI 640868. *Capsicum annuum* L.
Cultivar. "Chile de Arbol"; PBC1514; Grif 15825. Collected in United States. de Arbol type.

PI 640869. *Capsicum annuum* L.
Cultivar. "Golden Bell"; PBC1517; Grif 15827. Collected in United States. Bell type.

PI 640870. *Capsicum annuum* L.
Cultivar. "Large Red Hot Cherry"; PBC1519; Grif 15828. Collected in United States. Cherry type.

PI 640871. *Capsicum annuum* L.
Cultivar. "Mexi Bell"; PBC1520; Grif 15829. Collected in United States. Bell type.

PI 640872. *Capsicum annuum* L.
Cultivar. "Pimento"; PBC1521; Grif 15830. Collected in United States. Pimento type.

PI 640873. *Capsicum annuum* L.
Cultivar. "Serrano"; PBC1522; Grif 15831. Collected in Mexico. Serrano type.

PI 640874. *Capsicum annuum* L.
Cultivar. "Hybrid Huarena"; PBC1525; Grif 15832. Collected in Thailand. Cayenne type.

PI 640875. *Capsicum annuum* L.
Cultivar. "Barito"; PBC1528; Grif 15833. Collected in Indonesia. Cayenne type.

PI 640876. Capsicum annuum L.
Cultivar. "Permawhite"; PBC1533; Grif 15834. Collected in United States. Cherry type.

PI 640877. Capsicum annuum L.
Cultivar. "Halawatha Selection"; PBC1536; Grif 15835. Collected in Sri Lanka. Minibell type.

PI 640878. Capsicum annuum L.
Cultivar. "Punjab Mirch 27"; PBC1542; Grif 15836. Collected in India. Conibell type.

PI 640879. Capsicum annuum L.
Cultivar. PBC 912; Grif 15866. Collected in Tanzania. Habanero type.

PI 640880. Capsicum baccatum L.
Cultivar. "Orange Selex"; PBC 80; Grif 15837. Collected in Peru. Campanulate type.

PI 640881. Capsicum baccatum L.
Cultivar. PBC 81; Grif 15838. Collected in Peru. Campanulate type.

PI 640882. Capsicum baccatum L.
Cultivar. PBC 85; Grif 15839. Collected in Peru. Campanulate type.

PI 640883. Capsicum baccatum L.
Cultivar. "Mexico"; PBC 519; Grif 15840. Collected in Mexico. Serrano type.

PI 640884. Capsicum baccatum L.
Cultivar. "Dedo de moca"; PBC 711; Grif 15842. Collected in Brazil. Campanulate type.

PI 640885. Capsicum baccatum L.
Cultivar. "IHR 517A"; PBC 785; Grif 15843. Collected in India. Cayenne type.

PI 640886. Capsicum baccatum L.
Cultivar. "PM 1026"; PBC 850; Grif 15844. Collected in Bolivia. Wrinkled elong. type.

PI 640887. Capsicum baccatum L.
Cultivar. "PM 1027"; PBC 851; Grif 15845. Collected in Bolivia. Wrinkled elong. type.

PI 640888. Capsicum baccatum L.
Cultivar. "Kovinchu"; PBC 880; Grif 15846. Collected in Australia. Cayenne type.

PI 640889. Capsicum baccatum L.
Cultivar. "C. baccatum pend. 3-4"; PBC1351; Grif 15847. Collected in France. Cayenne type.

PI 640890. Capsicum baccatum L.
Cultivar. "Aji Yellow"; PBC1422; Grif 15848. Collected in Peru. Cayenne/New Mexican type.

PI 640891. Capsicum chinense Jacq.
Cultivar. PBC 86; Grif 15851. Collected in Peru. Campanulate type.

PI 640892. Capsicum chinense Jacq.
Cultivar. "AMA 11"; PBC 193; Grif 15858. Collected in Brazil. Campanulate type.

PI 640893. Capsicum chinense Jacq.
Cultivar. "AMA 12"; PBC 194; Grif 15859. Collected in Brazil. Campanulate type.

PI 640894. Capsicum chinense Jacq.
Cultivar. PBC 306; Grif 15860. Collected in Peru. Campanulate type.

PI 640895. Capsicum chinense Jacq.
Cultivar. "L-178"; PBC 562; Grif 15861. Collected in United States. Habanero type.

PI 640896. Capsicum chinense Jacq.
Cultivar. PBC 660; Grif 15862. Collected in Zambia. Campanulate type.

PI 640897. Capsicum chinense Jacq.
Cultivar. PBC 808; Grif 15863. Collected in China. Habanero type.

PI 640898. Capsicum chinense Jacq.
Cultivar. PBC 890; Grif 15864. Collected in Tanzania. Cayenne type.

PI 640899. Capsicum chinense Jacq.
Cultivar. PBC 909; Grif 15865. Collected in Tanzania. Habanero type.

PI 640900. Capsicum chinense Jacq.
Cultivar. PBC 932; Grif 15867. Collected in United States. Squash type.

PI 640901. Capsicum chinense Jacq.
Cultivar. "Aji Brown"; PBC1427; Grif 15869. Collected in United States. Campanulate type.

PI 640902. Capsicum chinense Jacq.
Cultivar. "Yellow Squash"; PBC1506; Grif 15870. Collected in United States. Habanero type.

PI 640903. Capsicum frutescens L.
Cultivar. "Habanero"; PBC 113; Grif 15852. Collected in Mexico. Habanero type.

PI 640904. Capsicum frutescens L.
Cultivar. "Mullai"; PBC 160; Grif 15871. Collected in Sri Lanka. Tabasco type.

PI 640905. Capsicum frutescens L.
Cultivar. "Cream"; PBC 162; Grif 15872. Collected in Sri Lanka. Tabasco type.

PI 640906. Capsicum frutescens L.
Cultivar. "Peruvian Purple Chile"; PBC 326; Grif 15873. Collected in Peru. Ornamental type.

PI 640907. Capsicum frutescens L.
Cultivar. "UL-3878"; PBC 410; Grif 15875. Collected in Nigeria. Cayenne type.

PI 640908. Capsicum frutescens L.
Cultivar. "Rawit Kutoarjo"; PBC 537; Grif 15878. Collected in Indonesia. Tabasco type.

PI 640909. Capsicum frutescens L.
Cultivar. "Tabasco L-167"; PBC 559; Grif 15881. Collected in United States. Tabasco type.

PI 640910. Capsicum frutescens L.
Cultivar. "TVRC#23"; PBC 659; Grif 15882. Collected in Thailand. Tabasco type.

The following were developed by Craig R. Grau, University of Wisconsin, Department of Plant Pathology, 1630 Linden Drive, Madison, Wisconsin 53706, United States; Glen L. Hartman, USDA-ARS, Crop Protection Research, 70 NSRC, 1101 W. Peabody Dr., Urbana, Illinois 61801, United States; Brian W. Diers, University of Illinois, Department of Crop Sciences, 1102 S. Goodwin Ave., Urbana, Illinois 61801, United States; Wayne Pedersen, University of Illinois, 68 EASB, 1101 West Peabody Drive, Urbana, Illinois 61801, United States; Dechun Wang, Michigan State University, Department of Crop and Soil Sciences, A384-E Plant and Soil Science Building, East Lansing, Michigan 48824-1325, United States; David Hoffman, Syngenta Seeds, Inc., 809 32nd Avenue, Brookings, South Dakota 57006, United States; F.J. Kopisch-Obuch, Georg-August University, Institute of Agronomy and Plant Breeding, Bon-Siebold-Str. 8, Gottingen, Germany. Received 10/12/2005.

PI 640911. Glycine max (L.) Merr.
Breeding. Pureline. AxN-1-55; SY 516001. GP-315. Pedigree - AxN-1-55 is an F4 plant selection from the cross Asgrow A2506 x Sygenta (formerly Novartis) S19-90. The parents of S19-90 are Pride 'B152' and 'Pella'. The pedigree of B152 is Northrup King 'S1346' (6) x 'Mack' and the pedigree of S1346 is A55-4629-4 x PI 257435. The parents of A55-4269-4 are 'Roanoke' x 'Hawkeye'. The parents of A2506 are Northrup King 'S14-60' and Asgrow 'A3501'. The parents of A3501 are Asgrow 'A3127' and 'Williams 82' and the parents of A3127 are 'Williams' and 'Essex'. The pedigree of S14-60 is Northrup King 'S14-92' x 'Hodgson' and the parents of S14-92 are 'Corsoy' and 'Wayne'. AxN-1-55 is an indeterminate line classified as having a midgroup II maturity. It was released because of its partial resistance to Sclerotinia stem rot [caused by Sclerotinia sclerotiorum (Lib.) de Bary] and good agronomic performance from 1997 to 2004 in cooperative Sclerotinia stem rot tests across the north central region of the USA. Across 11 environments of this test that had sufficient Sclerotinia stem rot to rate plant responses in the field, AxN-1-55 was significantly ($P<0.05$) less dased than S19-90 or A2506. Sclerotinia stem rot infections were rated in these tests by individually scoring plants and calculating a disease severity index (DSI) for each plot. The DSI across environments was 17.7 for AxN-1-55, 29.3 for Syngenta S19-90, and 34.7 for A2506. S19-90 is recognized by soybean researchers as a partially resistant check that when challenged with S. sclerotiorum, typically shows a high level of resistance. AxN-1-55 was tested for yield and other agronomic traits across 19 environments of the cooperative tests. Seven of these environments are

included in the 11 that were rated for Sclerotinia stem rot resistance, whereas little or no Sclerotinia stem rot was present at the other 12 locations. Across the 19 environments, AxN-1-55 yielded 2886 kg/ha compared to 2928 kg/ha for S19-90 and 3033 kg/ha for A2506. These differences were not significant at a=0.05. The maturity of AxN-1-55 was 2 days later than S19-90 and 4 days earlier than A2506. AxN-1-55 was 4 cm taller than S19-90 and 3 cm taller than A2506, and the lodging for AxN-1-55 was 0.1 unit (on a 1 to 5 scale) less than S19-90 and 0.2 less than A2506. Compared to 'Loda' across 15 of the 19 environments, AxN-1-55 yielded 147 kg/ha less, matured 6 days earlier, was 9 cm taller and had 0.3 units less lodging. AxN-1-55 has purple flowers, tawny pubescence, brown pod color at maturity, and yellow seeds. The line segregates for both black and gray hila.

Unknown source. Received 03/24/1989.

PI 640912. Phaseolus vulgaris L.
Cultivar. W6 4; START. Collected in Hungary.

Unknown source. Received 03/24/1989.

PI 640913. Phaseolus vulgaris L.
Cultivar. W6 5; AGROTICIA IV. Collected in Hungary.

Unknown source. Received 03/24/1989.

PI 640914. Phaseolus lunatus L.
Cultivar. FEHER LIMA; W6 6. Collected in Hungary.

Unknown source. Received 06/19/1989.

PI 640915. Phaseolus vulgaris L.
Cultivated. W6 102. Collected in Hungary.

Unknown source. Received 06/19/1989.

PI 640916. Phaseolus vulgaris L.
Cultivated. W6 103. Collected in Hungary.

The following were donated by Anton C. Zeven, Agricultural University, Institute of Plant Breeding (I.v.P.), P.O. Box 386, Wageningen, Gelderland 6700 AJ, Netherlands. Received 06/19/1989.

PI 640917. Phaseolus vulgaris L.
Cultivated. IvP 2.46; W6 112. Collected in Netherlands. Domburg area. Locality was Domburg. Primitive cultivar.

The following were donated by O.W. Norvell, Stanford University, Palo Alto, California, United States. Received 01/01/1989.

PI 640918. Phaseolus sp.
Wild. 3606; W6 2434.

The following were donated by Emil Milkov, Institute for Wheat and Sunflower, Magdalena Telezona, Technician, "Dobroudja" 9520, General Toschevo, Tolbukhin 9520, Bulgaria. Received 01/21/1992.

PI 640919. Phaseolus vulgaris L.
Cultivar. "1016 IGSR"; 467; W6 9602.

PI 640920. Phaseolus vulgaris L.
Cultivar. "1017 IGSR"; 463; W6 9603.

PI 640921. Phaseolus vulgaris L.
Cultivar. "1022"; 480; W6 9604.

PI 640922. Phaseolus vulgaris L.
Cultivar. "ARDELLANA"; 536; W6 9610. Collected in Russian Federation.

PI 640923. Phaseolus vulgaris L.
Cultivar. "ASTOR"; 734; W6 9611.

PI 640924. Phaseolus vulgaris L.
Cultivar. "AVANS"; 539; W6 9612. Collected in Romania.

PI 640925. Phaseolus vulgaris L.
Cultivar. "B. CHERKVA 5"; 749; W6 9615.

PI 640926. Phaseolus vulgaris L.
Cultivar. "BANJA 6"; 612; W6 9621.

PI 640927. Phaseolus vulgaris L.
Cultivar. "BJAGA 1"; 552; W6 9623.

PI 640928. Phaseolus vulgaris L.
Cultivar. "COCAHNATE 72"; 736; W6 9627. Collected in Mexico.

PI 640929. Phaseolus vulgaris L.
Cultivar. "DOBRUDZHANSKI 7"; 745; W6 9634.

PI 640930. Phaseolus vulgaris L.
Cultivar. "DUNAVCI 4"; 723; W6 9635.

PI 640931. Phaseolus vulgaris L.
Cultivar. "DUNAVCI 6"; 725; W6 9637.

PI 640932. Phaseolus vulgaris L.
Cultivar. "GOSNODINCI 4"; 577; W6 9650.

PI 640933. Phaseolus vulgaris L.
Cultivar. "GOSPODINCI 1"; 576; W6 9652.

PI 640934. Phaseolus vulgaris L.
Cultivar. "GRADINEC"; 743; W6 9654.

PI 640935. Phaseolus vulgaris L.
Cultivar. "HALI"; 878; W6 9656.

PI 640936. Phaseolus vulgaris L.
Cultivar. "HK 82-11"; 470; W6 9658.

PI 640937. Phaseolus vulgaris L.
Cultivar. "KANADA 1"; 647; W6 9668. Collected in Canada.

PI 640938. Phaseolus vulgaris L.
Cultivar. "KANADA 84-1"; 673; W6 9670. Collected in Canada.

PI 640939. Phaseolus vulgaris L.
Cultivar. "KANADA 84-2"; 674; W6 9671. Collected in Canada.

PI 640940. Phaseolus vulgaris L.
Cultivar. "KJUSTENDIL 1"; 579; W6 9673.

PI 640941. Phaseolus vulgaris L.
Cultivar. "KONJAVO 10"; 571; W6 9679.

PI 640942. Phaseolus vulgaris L.
Cultivar. "ZUCHA"; 713; W6 9804. Collected in Russian Federation.

The following were collected by Judy VanVleet-Mills, Palouse Empire Marketing, Inc., Moscow, Idaho 83843, United States. Donated by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 11/02/1993.

PI 640943. Phaseolus vulgaris L. **var. vulgaris**
Cultivated. W6 13226. Collected 09/1993 in China. From the Provinces of Hebei and Shanxi and were collected in the port of Tanggu in Hebei Province. Bean white kidney (Alubia type).

The following were collected by O.W. Norvell, Stanford University, Palo Alto, California, United States. Received 01/01/1989.

PI 640944. Phaseolus sp.
Wild. 6; W6 15576. Collected in Unknown.

PI 640945. Phaseolus acutifolius A. Gray
Wild. 432; W6 15584. Collected 1955 in Unknown.

The following were donated by O.W. Norvell, Stanford University, Palo Alto, California, United States. Received 01/01/1989.

PI 640946. Phaseolus sp.
Uncertain. 346; W6 15619. Collected 1955 in Unknown.

PI 640947. Phaseolus acutifolius var. tenuifolius A. Gray
Uncertain. M64-2; W6 15625. Collected 1981 in Mexico.

PI 640948. Phaseolus sp.
Uncertain. N352; W6 15689.

PI 640949. Phaseolus acutifolius A. Gray
Wild. M910; W6 15708. Collected in Mexico. Collected: Canyon Santa Clara, Chihuahua. About half-way between C. Juarez, Chihuahua (out from Parrita, 283 km from C. Juarez) and Chihuahua City, Chih. and in the mts. some 5 miles west of highway. (From original O. Norvell notes, 1948.)

PI 640950. Phaseolus acutifolius var. tenuifolius A. Gray
Uncertain. M911; W6 15709.

PI 640951. Phaseolus acutifolius A. Gray
Wild. M912; W6 15710. Collected in Mexico. Collected: Canyon Santa Clara, Chihuahua. About half-way between C. Juarez, Chihuahua (out from Parrita, 283 km from C. Juarez) and Chihuahua City, Chih. and in the mts. some 5 miles west of highway. (From original O. Norvell notes, 1948.)

PI 640952. Phaseolus acutifolius var. tenuifolius A. Gray
Uncertain. M913; W6 15711.

PI 640953. Phaseolus acutifolius A. Gray
Wild. M916; W6 15714. Collected in Mexico. Collected: Canyon Santa Clara, Chihuahua. About half-way between C. Juarez, Chihuahua (out from Parrita, 283 km from C. Juarez) and Chihuahua City, Chih. and in the mts. some 5 miles west of highway. (From original O. Norvell notes.)

PI 640954. Phaseolus acutifolius A. Gray
Wild. M918; W6 15716. Collected in Mexico. Collected: Canyon Santa Clara, Chihuahua. About half-way between C. Juarez, Chihuahua (out from Parrita, 283 km from C. Juarez) and Chihuahua City, Chih. and in the mts. some 5 miles west of highway. (From original O. Norvell notes.)

PI 640955. Phaseolus acutifolius var. tenuifolius A. Gray
Uncertain. M923; W6 15718.

PI 640956. Phaseolus acutifolius A. Gray
Uncertain. M926; W6 15720.

PI 640957. Phaseolus acutifolius A. Gray
Uncertain. M927; W6 15721.

PI 640958. Phaseolus sp.
Uncertain. M929; W6 15722.

PI 640959. Phaseolus sp.
Uncertain. M933; W6 15724.

PI 640960. Phaseolus acutifolius var. tenuifolius A. Gray
Uncertain. M934; W6 15725.

The following were collected by Gaylord Mink, Washington State University, Irrigated Agricultural Res. & Ext. Ctr., Route 2, Box 2953-A, Prosser, Washington 99350, United States. Received 11/16/1994.

PI 640961. Phaseolus vulgaris L.
Cultivated. "BANTENGA"; W6 16569. Collected 1994 in Tanzania. Town of Muleba in the Bukoba region.

PI 640962. Phaseolus vulgaris L.
Cultivated. "MWANA MWANA"; W6 16575. Collected 1994 in Tanzania. Town of Bukoba in the Bukoba region.

The following were collected by James R. Steadman, University of Nebraska, Department of Plant Pathology, 406 Plant Science Hall, Lincoln, Nebraska 68583, United States. Received 05/23/1995.

PI 640963. Phaseolus vulgaris var. aborigineus (Burkart) Baudet
Uncertain. G19895; A-010.05; W6 17009. Collected 04/22/1995 in Argentina. Latitude 24° 54' 10" S. Longitude 65° 28' 31" W. Elevation 1250 m. Salta INTA station. See original description.

The following were collected by Roberto Neumann, Instituto Nacional de Tecnologia Agropecuaria, C.C. 228, Salta, Salta 4400, Argentina. Received 1995.

PI 640964. Phaseolus vulgaris L.
Wild. W6 17470. Collected 04/1995 in Argentina. Latitude 26° 23' S. Longitude 65° 28' W. Elevation 1140 m. West Higuera, Tucuman. Anthracnose and bruchids.

The following were collected by Craig Sandlin, University of Nebraska, Department of Plant Pathology, Lincoln, Nebraska 68583-0722, United States; Marcelo Salgado, Instituto Nacional de Tecnologia Agropecuaria, C.C. 228, Salta, Salta 4400, Argentina; Roberto Neumann, Instituto Nacional de Tecnologia Agropecuaria, C.C. 228, Salta, Salta 4400, Argentina. Received 1995.

PI 640965. Phaseolus vulgaris L.
Wild. W6 17474. Collected 04/1995 in Argentina. Latitude 25° 9' 41" S. Longitude 65° 36' 41" W. Elevation 1380 m. Chorro Blanco. Quebrada de Escoipe, Salta. Growing on a steep, north-facing bank in grass (Lamprothyrus hieronymii). Cologonium sp. was collected at the same site. Seeds were collected from several plants. Angular leaf spot was observed.

The following were collected by Craig Sandlin, University of Nebraska, Department of Plant Pathology, Lincoln, Nebraska 68583-0722, United States; Marcelo Salgado, Instituto Nacional de Tecnologia Agropecuaria, C.C. 228, Salta, Salta 4400, Argentina. Received 1995.

PI 640966. Phaseolus vulgaris L.
Wild. W6 17500. Collected 05/1995 in Salta, Argentina. Latitude 24° 39' S. Longitude 65° 22' 1" W. Camino de Cornisas, 10.2 km from Rio Vaqueros, heading north. Plants were found on both the west and east sides of the road. Plants on the west side were growing in dense vegetation in the shade, and had distinctly thick vines and leaves. Seeds collected from several plants.

PI 640967. Phaseolus vulgaris L.
Wild. W6 17501. Collected 05/1995 in Salta, Argentina. Latitude 24° 39' S. Longitude 65° 22' 1" W. La Calderilla, Camino de Cornisas, 6.2 km from Rio Vaqueros. Plants were found on the sunny side of the road. Seeds were collected from several plants.

PI 640968. Phaseolus vulgaris L.
Wild. W6 17502. Collected 05/1995 in Salta, Argentina. Latitude 24° 43' 1" S. Longitude 65° 28' 59" W. Quebrada de San Lorenzo. San Lorenzo, Salta. Plants were growing in brush by a small stream and along the road in a small canyon that is part of a park in San Lorenzo, close to the city of Salta. Seeds were collected from several plants.

The following were collected by James R. Steadman, University of Nebraska, Department of Plant Pathology, 406 Plant Science Hall, Lincoln, Nebraska 68583, United States; Roberto Neumann, Instituto Nacional de Tecnologia Agropecuaria, C.C. 228, Salta, Salta 4400, Argentina. Received 10/1996.

PI 640969. Phaseolus vulgaris var. aborigineus (Burkart) Baudet
Wild. A2-002-3; W6 18734. Collected 05/06/1996 in Argentina.

PI 640970. Phaseolus vulgaris var. aborigineus (Burkart) Baudet
Wild. A2-006-2; W6 18740. Collected 05/06/1996 in Argentina.

PI 640971. Phaseolus vulgaris var. aborigineus (Burkart) Baudet
Wild. A2-010; W6 18746. Collected 05/07/1996 in Argentina.

The following were donated by Dermot P. Coyne, University of Nebraska, Department of Horticulture, 386 Plant Sciences Hall, Lincoln, Nebraska 68583-0724, United States. Received 10/23/1996.

PI 640972. Phaseolus vulgaris L.
Uncertain. MW12; W6 18781.

The following were developed by J. Rennie Stavely, USDA, ARS, Microbiology and Plant Pathology Lab., Room 252, Building 011A, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 12/09/1996.

PI 640973. Phaseolus vulgaris L.
Cultivated. "Pinto 650"; W6 18972. Bean differential for bean rust (Uromyces appendiculatus).

The following were collected by Gary Nabhan, Native Seeds/SEARCH, 3950 W. New York Drive, Tucson, Arizona 85745, United States; Barney T. Burns. Received 1985.

PI 640974. Phaseolus leptostachyus Benth.
Wild. BB 8557; W6 20106. Collected 10/16/1985 in Chihuahua, Mexico. Latitude 27° N. Longitude 106° 14' 24" W. Elevation 1900 m. 58.5 km west of Hidalgo de Parral in southwest Chihuahua.

The following were collected by Gary Nabhan, Native Seeds/SEARCH, 3950 W. New York Drive, Tucson, Arizona 85745, United States. Received 1985.

PI 640975. Phaseolus vulgaris L.
Cultivated. GN 599a; Wimori Grease Bean; W6 20116. Collected 11/16/1976 in Arizona, United States. Latitude 36° 55' 41" N. Longitude 110° 40' 19" W. From lower Moenkopi, grown in Hotevilla, Hopi Reservation on sand dunes.

PI 640976. Phaseolus acutifolius var. tenuifolius A. Gray
Cultivated. GN 84155; W6 20146. Collected 1985 in Arizona, United States. Latitude 31° 33' 23" N. Longitude 111° 2' 59" W. Santa Cruz County. Stone Corral Canyon, Tumacaori.

The following were collected by Cesar Azurdia, Instituto de Investigaciones Agronomicas, Universidad de San Carlos de Guatemala, Ciudad Universitaria, Zona 12, Guatemala City, Guatemala, Guatemala; Daniel Debouck, International Center for Tropical Agriculture, Germplasm Resources Unit, Apdo. aereo 6713, Cali, Valle, Colombia. Donated by Helmer Ayala, Universidad de San Carlos de Guatemala, Ciudad Universitaria, Zona 12, Apartado Postal No 1545, San Carlos, Guatemala. Received 01/15/1998.

PI 640977. Phaseolus coccineus L.
Wild. 3077; W6 20519. Collected 01/1995 in Guatemala. Latitude 14° 48' N. Longitude 91° 29' W. Elevation 2070 m. Almolonga, 3 km southeast of Almolonga.

PI 640978. Phaseolus xanthotrichus Piper
Wild. 3086; W6 20525. Collected 01/1995 in Guatemala. Latitude 14° 45' N. Longitude 91° 31' W. Elevation 1860 m. Zunil, 2.5 km northeast of Estancia de la Cruz, Aguas Amargas.

The following were collected by O.W. Norvell, Stanford University, Palo Alto, California, United States. Received 03/15/1999.

PI 640979. Phaseolus vulgaris L.
Cultivated. PI 430175 mixture; W6 21068. Collected 1978 in Mexico. Orignal labeled as the offspring of PI 430175, but it is not Molly said.

The following were donated by G.F. Freytag, USDA-ARS, National Seed Storage Laboratory, 1111 South Mason Street, Fort Collins, Colorado 80521-4500, United States. Received 04/04/1999.

PI 640980. Phaseolus sp.
Wild. TARS 132D; W6 21644. Collected in Jalisco, Mexico. Latitude 19° 51' N. Longitude 103° 3' W. Elevation 1650 m. Velodero.

The following were donated by Dermot P. Coyne, University of Nebraska, Department of Horticulture, 386 Plant Sciences Hall, Lincoln, Nebraska 68583-0724, United States. Received 08/24/1994.

PI 640981. Phaseolus vulgaris L.
Cultivated. Pompadour H; W6 21908. coleccion Pompadour Vieja.

PI 640982. Phaseolus vulgaris L.
Cultivated. Pompadour Q5; W6 21924. coleccion Pompadour Vieja.

PI 640983. Phaseolus vulgaris L.
Cultivated. Pompadour S; W6 21928. coleccion Pompadour Vieja.

PI 640984. Phaseolus vulgaris L.
Cultivated. Chijor-38; W6 21939. coleccion Pompadour Nueva.

The following were collected by R. Phillip Upchurch, The University of Arizona, College of Agric., Office of the Dean, Forbes, Room 306, Tucson, Arizona 85721, United States; Jerry Kaiser, U.S. Department of Agriculture, Natural Resources Conservation Service, 2803 N. Hwy 79, Elsberry, Missouri 63343, United States. Donated by Mathew B. Johnson, University of Arizona, Desert Legume Program, 2120 East Allen Road, Tucson, Arizona 85719, United States. Received 10/2001.

PI 640985. Phaseolus acutifolius A. Gray
Wild. DLEG 880031; W6 23657. Collected 10/1988 in Arizona, United States. Latitude 31° 24' 58" N. Longitude 110° 45' 22" W. Santa Cruz Co., Patagonia Mts. Annual vine, drought tolerant. Blooms August - October. Accession has been regenerated.

The following were donated by Mathew B. Johnson, University of Arizona, Desert Legume Program, 2120 East Allen Road, Tucson, Arizona 85719, United States. Received 10/2001.

PI 640986. Phaseolus acutifolius A. Gray **var. acutifolius**
Wild. DLEG 880087; W6 23659. Annual vine, drought tolerant. No data.

The following were collected by E.G. Montgomery, University of Nebraska, Nebraska Agric. Exp. Station, Lincoln, Nebraska, United States. Donated by Mathew B. Johnson, University of Arizona, Desert Legume Program, 2120 East Allen Road, Tucson, Arizona 85719, United States. Received 10/2001.

PI 640987. Phaseolus acutifolius A. Gray **var. acutifolius**
Cultivated. DLEG 890042; W6 23660. Collected 10/1984 in Arizona, United States. Latitude 32° 14' 38" N. Longitude 111° 10' 1" W. Pima Co., Arizona Sonora Desert Museum. Received from Arizona Sonora Desert Museum. ASDM 1984-242. Accession has been regenerated.

The following were collected by Richard S. Felger, Tucson, Arizona, United States. Donated by Mathew B. Johnson, University of Arizona, Desert Legume Program, 2120 East Allen Road, Tucson, Arizona 85719, United States. Received 10/2001.

PI 640988. Phaseolus acutifolius A. Gray
Cultivated. DLEG 900204; W6 23662. Collected 10/1989 in Sonora, Mexico. Latitude 29° 0' N. Longitude 112° 25' 1" W. Pima Co., Private residence in Tucson. Seed originally collected in the Sierra Kunkak, Isla Tiburon, Sonora, Mexico. Received from Dr. Richard S. Felger. Original wild plants growing in a very arid habitat.

The following were collected by Jerry Kaiser, U.S. Department of Agriculture, Natural Resources Conservation Service, 2803 N. Hwy 79, Elsberry, Missouri 63343, United States. Donated by Mathew B. Johnson, University of Arizona, Desert Legume Program, 2120 East Allen Road, Tucson, Arizona 85719, United States. Received 10/2001.

PI 640989. Phaseolus acutifolius A. Gray **var. acutifolius**
Wild. DLEG 900547; W6 23665. Collected 10/15/1990 in Arizona, United States. Latitude 31° 24' 58" N. Longitude 110° 45' 22" W. Santa Cruz Co., Patagonia Mts.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 10/2001.

PI 640990. Phaseolus acutifolius A. Gray **var. acutifolius**
Wild. G40075; Norvell 15-2; W6 23678. Collected 2001 in New Mexico, United States. Latitude 31° 21' N. Longitude 108° 5' 2" W. Hidalgo county New Mexico.

PI 640991. Phaseolus acutifolius var. tenuifolius A. Gray
Wild. G40083; DGD-287; W6 23679. Collected 2001 in Durango, Mexico. Latitude 26° 19' 59" N. Longitude 105° 0' 24" W. Elevation 2080 m. Villa Ocampo county, Mexico.

PI 640992. Phaseolus acutifolius A. Gray
Wild. DGD-2356; G40184; W6 23680. Collected 2001 in Queretaro, Mexico. Latitude 17° 35' 17" N. Longitude 99° 0' 11" W. Elevation 1820 m. Tixtla county, Mexico.

PI 640993. Phaseolus acutifolius var. tenuifolius A. Gray
Wild. G40233; Buhrow 85-2 or TARS-383; W6 23682. Collected 2001 in Arizona, United States. Latitude 32° 45' N. Longitude 109° 0' 22" W. Graham county, Arizona.

PI 640994. Phaseolus acutifolius A. Gray
Wild. G40240; JAG-119; W6 23683. Collected 2001 in Durango, Mexico. Latitude 24° 0' 4" N. Longitude 104° 0' 11" W. Nombre de Di county, Mexico.

PI 640995. Phaseolus acutifolius var. tenuifolius A. Gray
Wild. G40257; Norvell X-79; W6 23684. Collected 2001 in Mexico.

PI 640996. Phaseolus acutifolius var. tenuifolius A. Gray
Wild. G40273; BYE 10059 or TARS-572; W6 23685. Collected 2001 in Chihuahua, Mexico. Latitude 27° 6' N. Longitude 107° 0' 24" W. Batopilas county, Mexico.

The following were donated by Joseph Simcox, The Rare Vegetable Seed Consortium, C/O Steven Brack, Mesa Garden, Belen, New Mexico 87002, United States; Robert Lobitz, The Rare Vegetable Seed Consortium, 58 Greer Road, Belen, New Mexico 87002, United States. Received 01/05/2005.

PI 640997. Phaseolus vulgaris L.
Cultivated. Black Knightfall; W6 26488. Bush type. Seed color: light

gray with black eye & tiny spots.

PI 640998. Phaseolus vulgaris L.
Cultivated. Capitole Snap; W6 26491. Bush type. Seed color: small, white long grain rice-shaped.

The following were donated by Tadis W. Box, 301 West Center Street, Logan, Utah 84321, United States. Received 07/26/2005.

PI 640999. Phaseolus acutifolius A. Gray **var. acutifolius**
Cultivated. Frijoles de los Indios; W6 27604. Collected 1980 in Mexico. Seed came from a rancher west of San Angelo around 1980. Simliar type beans were common in the Thad Box family in central Texas in the 1930's.

The following were developed by USDA- Narural Resources Conservation Serice, Plant Materials Center, 21001 North Elliot Road, Lockeford, California 95237-0068, United States. Donated by David A. Dyer, USDA-NRCS, Plant Materials Center, 21001 North Elliot Road, Lockeford, California 95237-0068, United States. Received 03/29/2005.

PI 641000. Distichlis spicata (L.) Greene
Cultivated. LK517f Germplasm; 9032700; W6 26748. Collected 2005 in California, United States. Elevation 75 m. Collected from a native stand near Pxiley, California (T023S-R24E-S10). It was evaluated at Lockeford, California Plant Materials Center against 70 other populations assembled from California. In 1993 six accessions were selected for advanced evaluations in a site with claysoils and was on the side slopes of an irrgation canal. In October 1994, and evaluation confirmed that accessions number 9032700 was superior.

The following were developed by Ron Fioritto, Ohio State University, Dept of Horticulture & Crop Science, OARDC, Wooster, Ohio 44691, United States; Anne E. Dorrance, Ohio State University, OARDC - Department of Plant Pathology, 1680 Madison Avenue, Wooster, Ohio 44691-4096, United States; S.A. McIntyre, USDA, ARS, Ohio State University, Dept. of Horticulture and Crop Science, Columbus, Ohio 43210-1086, United States; Clay H. Sneller, Ohio State University, O.A.R.D.C., 1680 Madison Avenue, Wooster, Ohio 44691, United States; Steven St. Martin, The Ohio State University, Department of Horticulture and Crop Science, 310D Kottman Hall, Columbus, Ohio 43210-1086, United States; M.K. Feller, Ohio State University, Ohio Agric. Res. and Development Center, Dept. of Horticulture and Crop Science, Columbus, Ohio 43210-1086, United States; S.A. Berry, Ohio State University, Ohio Agric. Res. and Development Center, Dept. of Plant Pathology, Columbus, Ohio 43210-1086, United States. Received 10/17/2005.

PI 641001. Glycine max (L.) Merr.
Cultivar. Pureline. "HS0-3243". CV-482. Pedigree - HS93-4118 x Kottman. White flowers, light tawny pubescence, tan pods, yellow seed with black hila. Is indeterminate and belongs to maturity group III (relative maturity 3.1). Is a commodity-type variety (used for oil and meal production). Carries the Rps1k and Rps3a genes for resistance to Phytophthora root and stem rot, caused by Phytophthora sojae. Has no transgenes.

The following were developed by Soon Jai Park, Agriculture and Agri-Food Canada, Harrow Research Station, 2585 County Road 20, Harrow, Ontario N0R 1G0, Canada; F. Kiehn, Agriculture and Agri-Food Canada, Research Centre, Unit 100 - 101 Route 100, Morden, Manitoba R6M 1Y5, Canada; T. Rupert, Agriculture and Agri-Food Canada, Morden Research Station, Morden, Manitoba R6M 1Y5, Canada. Received 10/07/2005.

PI 641002. Phaseolus vulgaris L.
Cultivar. Pureline. "PECOS". CV-260. Pedigree - Selected from a cross between C2048-59510 and AC Burrito. Has semi-determinate growth habit with very short vines or no vines, upright plant and narrow canopy. Pods are borne on nodes high above the ground. Seedlings have green hypocotyls and plants have white flowers. Leaves are medium green with short pubescence on the lower side. Pods have dark brown streaks on light tan background when ripe, and have short pubescence. Pods have a slight curvature with medium, weak curvature beak. Seeds are oval with brown irregular streaks on a light brown solid background, with white hilum, yellow hilum ring and shiny seed coat lustre. Resistant to bean common mosaic virus (BCMV) race 1 and 15 but susceptible to anthracnose [caused by Collectotrichum lindemuthianum] races a and d. Susceptible to common bacterial blight [caused by Xanthomonas phaseoli] and halo blight [caused by Pseudomonas syringe pv. phaseolocola]. Tolerant to white mould [caused by Sclerotinia sclerotiorum] possibly due to its upright plant type. Yielded 2790 kg ha-1 in cultivar trials in 1999-2000 in Ontario. Yielded 2697 kg ha-1 in Manitoba narrow trials in 2001-2002.

The following were developed by Soon Jai Park, Agriculture and Agri-Food Canada, Harrow Research Station, 2585 County Road 20, Harrow, Ontario N0R 1G0, Canada. Received 10/11/2005.

PI 641003. Phaseolus vulgaris L.
Genetic. Pureline. R69. GS-30. Pedigree - Derived from white bean cv. OAC Rico. Has green hypocotyls and white flower color, light brown pod at maturity, produces white teans (navy type) with dull seed coat and has indeterminate growth habit with short vine (IIb).

PI 641004. Phaseolus vulgaris L.
Genetic. Pureline. R99. GS-31. Pedigree - Derived from white bean cv. OAC Rico. Mutant has green hypocotyl and white flower color, light brown pod at maturity, produces white beans (navy type) with dull seed coat and has indeterminate growth habit with short vine (IIb).

The following were developed by Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Kevin E. McPhee, Washington State University, Crop & Soil Science Department, Johnson 305, Pullman, Washington 99164-6420, United States. Received 10/17/2005.

PI 641005. Pisum sativum L.
Cultivar. Pureline. "SPECTER"; PS9830F009. CV-26. Pedigree - PI 167253 / D258-1-3 / 5 / B686-320-0 / 4 / FENN*3 / WIS7105. A winter feed pea with tall growth habit; possesses recessive af for semi-leafless leaf morphology. Vines are 100cm long and internodes appear in a zigzag manner. Three to four basal branches typically formed in fall as a short

rosette prior to entering a winter dormant period. Normal, non-clasping stipules are moderately marbled. Flowering begins at the 24th node. flowers are white, conferred by recessive a, and usually borne doubly on the peduncles with three flowers per peduncle observed occasionally. Pods are straight, blunt ended and medium green with 4 to 6 seeds. Seeds are smooth and round with yellow cotyledons. Testa is clear, but is characterized by subtle mottling referred to as 'ghost mottling' resulting from the presence of dominant M in the presence of recessive a. Weight of 100 seeds averages 13.1 g. Resistant to race 1 of fusarium wilt caused by Fusarium oxysporum, but is susceptible to pea enation mosaic virus and powdery mildew.

The following were developed by Department of Agriculture, Thailand. Received 05/02/2005.

PI 641006 PVPO. Oryza sativa L.
Cultivar. "PRACHINBURI 2". PVP 200500240. Pedigree - BKNFR80086/HTAFR80038.

The following were developed by Pioneer Hi-Bred International, Inc., Plant Breeding Division, Department of Corn Breeding, Johnston, Iowa 50131-0085, United States. Received 05/16/2005.

PI 641007 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PHACV". PVP 200500222.

PI 641008 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PHADA". PVP 200500223.

PI 641009 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PHCA5". PVP 200500224.

PI 641010 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PHCAM". PVP 200500225.

PI 641011 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PHCCW". PVP 200500226.

PI 641012 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PHCEG". PVP 200500227.

PI 641013 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PHCJP". PVP 200500228.

PI 641014 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PHCMV". PVP 200500229.

PI 641015 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PHCND". PVP 200500230.

PI 641016 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PHCPR". PVP 200500231.

PI 641017 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PH6WC". PVP 200500252.

PI 641018 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PHAR1". PVP 200500253.

PI 641019 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PHB00". PVP 200500254.

PI 641020 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PHB8V". PVP 200500255.

PI 641021 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PHC77". PVP 200500256.

PI 641022 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PHCER". PVP 200500257.

PI 641023 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PHEHG". PVP 200500258.

PI 641024 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PH9HM". PVP 200500260.

PI 641025 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PH2N1". PVP 200600004.

The following were collected by Max M. Gonzalez, Instituto de Ciencia y Technologia Agricola, Guatemala City, Guatemala. Donated by Paul W. Bosland, New Mexico State University, Department of Plant, & Environmental Sciences, Las Cruces, New Mexico 88003-0003, United States. Received 10/25/2005.

PI 641026. Capsicum lanceolatum (Greenm.) C. V. Morton & Standl.
Wild. 90017. Collected 1998 in Guatemala. Biotopo El Quetzal (nature preserve).

The following were collected by Alfonso Del Rio, University of Wisconsin, Department of Horticulture, 1575 Linden Drive, Madison, Wisconsin 53706, United States; John Bamberg, USDA, ARS, Potato Introduction Station, Peninsula Experiment Station, Sturgeon Bay, Wisconsin 54235, United States; Charles Fernandez, University of Wisconsin, Potato Introduction Station, Peninsula Experiment Station, Sturgeon Bay, Wisconsin 54235, United States. Received 09/28/2005.

PI 641027. Solanum stoloniferum Schltdl. & Bouche
Wild. BFdR 132. Collected 09/21/2005 in Arizona, United States. Latitude 31° 25' 3" N. Longitude 110° 25' 51" W. Elevation 1692 m. Cochise County. Coronado National Forest, Sierra Vista Ranger District, Huachuca mountains. Along SR83 about one mile SE of Parker Lake. S side of roadway in Scotia Creek bottom among grass and brush; scrub oaks. Mature berries on green plants to 10" tall. Rare.

PI 641028. Solanum stoloniferum Schltdl. & Bouche
Wild. BFdR 133. Collected 09/22/2005 in Arizona, United States. Latitude 31° 22' 25" N. Longitude 110° 19' 54" W. Elevation 1776 m. Cochise County. Coronado National Forest, Sierra Vista Ranger District, Huachuca mountains. S on SR92 to FR61, W to Montezuma Pass, W to FR771,

N 100 yards on E side of road. Moist sandy soil and under scrub oaks. Yellowed plants to 10" with occasional mature berries. Collected berries. Rare.

PI 641029. Solanum jamesii Torr.
Wild. BFdR 134. Collected 09/22/2005 in Arizona, United States. Latitude 31° 22' 25" N. Longitude 110° 19' 54" W. Elevation 1776 m.
Cochise County. Coronado National Forest, Sierra Vista Ranger District, Huachuca mountains. S on SR92 to FR61, W to Montezuma Pass, W to FR771, N 100 yards on E side of road. Sandy soil and under scrub oaks. Abundant (many thousands) small to large (10") yellowed plants without flowers or berries. Collected one tuber from numerous dispersed colonies.

PI 641030. Solanum stoloniferum Schltdl. & Bouche
Wild. BFdR 135. Collected 09/22/2005 in Arizona, United States. Latitude 31° 24' 1" N. Longitude 110° 19' 35" W. Elevation 2302 m.
Cochise County. Coronado National Forest, Sierra Vista Ranger District, Miller Peak Wilderness, Huachuca mountains. S on SR92 S to FR61, W to Montezuma Pass, W to jct with FR771, N on Miller Wilderness Ida Canyon Trail #110. Along trail NE facing shady slopes under pines in moist, black soil and mulch. Common small light green plants without flowers, berries rare. Collected berries.

PI 641031. Solanum stoloniferum Schltdl. & Bouche
Wild. BFdR 136. Collected 09/23/2005 in Arizona, United States. Latitude 31° 25' 2" N. Longitude 110° 18' 18" W. Elevation 2591 m.
Cochise County. Coronado National Forest, Sierra Vista Ranger District, Miller Peak Wilderness, Huachuca mountains. SR92 S to FR368 Carr Canyon Rd, W to #107 trailhead at Ramsey Vista campground. Along trail #107 to Carr Peak. On open N and E facing slopes with large burned Ponderosas or among brush and in shade under Aspens. Dark, moist soil. Yellowed plants without flowers to 12" tall with occasional mature berries.

PI 641032. Solanum stoloniferum Schltdl. & Bouche
Wild. BFdR 137. Collected 09/23/2005 in Arizona, United States. Latitude 31° 24' 18" N. Longitude 110° 18' 45" W. Elevation 2530 m.
Cochise County. Coronado National Forest, Sierra Vista Ranger District, Miller Peak Wilderness, Huachuca mountains. SR92 S to FR368 Carr Canyon Rd, W on #107 trail to #103 S to jct with #106 trail. + mile E down Miller Canyon trail #106. Abundant along trail. In narrow E-W canyon. Small yellowed or green plants in Ponderosa forest often protected by brush, with occasional mature berries. Collected berries.

PI 641033. Solanum stoloniferum Schltdl. & Bouche
Wild. BFdR 138. Collected 09/24/2005 in Arizona, United States. Latitude 31° 24' 19" N. Longitude 110° 18' 55" W. Elevation 2591 m.
Cochise County. Coronado National Forest, Sierra Vista Ranger District, Miller Peak Wilderness, Huachuca mountains. On Crest Trail #103 from jct with #107 for 1+ miles to Bear Saddle (jct with #110 and #122). On steep grade along trail shaded under Ponderosas and firs despite being S and W facing slopes. Moist black soil and rocks. Small yellow to 8" green plants. No flowers, but occasional mature berries. Collected berries.

PI 641034. Solanum stoloniferum Schltdl. & Bouche
Wild. BFdR 139. Collected 09/24/2005 in Arizona, United States. Latitude

31° 25' 0" N. Longitude 110° 20' 8" W. Elevation 2530 m. Cochise County. Coronado National Forest, Sierra Vista Ranger District, Miller Peak Wilderness, Huachuca mountains. On Crest Trail #103 from Bear Saddle (jct with #110 and #122) NW. On steep grades along trail shaded under Ponderosas and firs. Moist black soil and rocks. Small yellow to 8" green plants with occasional mature berries. Only one flower observed. One colony of a few very large, green plants with multiple large berries.

PI 641035. Solanum stoloniferum Schltdl. & Bouche
Wild. BFdR 140. Collected 09/24/2005 in Arizona, United States. Latitude 31° 25' 0" N. Longitude 110° 20' 10" W. Elevation 2530 m. Cochise County. Coronado National Forest, Sierra Vista Ranger District, Miller Peak Wilderness, Huachuca mountains. On Crest Trail #103 from 19E 25.00' to jct with trail #117 (Sunnyside Canyon, 25.43' x 20.75'). On steep grades along trail shaded under Ponderosas and firs. Moist black soil and rocks. Small yellow to 8" green plants with occasional mature berries. Collected berries.

PI 641036. Solanum stoloniferum Schltdl. & Bouche
Wild. BFdR 141. Collected 09/25/2005 in Arizona, United States. Latitude 31° 24' 18" N. Longitude 110° 18' 45" W. Elevation 2683 m. Cochise County. Coronado National Forest, Sierra Vista Ranger District, Miller Peak Wilderness, Huachuca mountains. On Crest Trail #103 from Bathtub Spring (jct with trail #106) to jct with access trail to Miller Peak (#105). Along trail shaded under Ponderosas and Firs on flat saddles or under brush, raspberries, ferns or Aspens on steep NE-facing grades. Moist black soil with rocks. Small yellow to 8" green plants with occasional mature berries. Collected berries.

PI 641037. Solanum stoloniferum Schltdl. & Bouche
Wild. BFdR 142. Collected 09/25/2005 in Arizona, United States. Latitude 31° 23' 35" N. Longitude 110° 17' 32" W. Elevation 2884 m. Cochise County. Coronado National Forest, Sierra Vista Ranger District, Miller Peak Wilderness, Huachuca mountains. On NE-facing side of Miller Peak summit. Moist black soil with rocks. Mostly green but spindly plants under brush with occasional mature berries. Collected berries.

PI 641038. Solanum stoloniferum Schltdl. & Bouche
Wild. BFdR 143. Collected 09/26/2005 in Arizona, United States. Latitude 31° 22' 42" N. Longitude 110° 16' 11" W. Elevation 1838 m. Cochise County. Coronado National Forest, Sierra Vista Ranger District, Miller Peak Wilderness, Huachuca mountains. In Lutz Canyon (FR59) then along trail #104 about 2.5 miles from SR92. Among grass and under brush in alluvial bars from running stream S of trail. Oaks, redbark and small pines. Only a few light green plants. One berry seen and collected.

PI 641039. Solanum stoloniferum Schltdl. & Bouche
Wild. BFdR 144. Collected 09/26/2005 in Arizona, United States. Latitude 32° 24' 56" N. Longitude 110° 43' 52" W. Elevation 2501 m. Pima County. Coronado National Forest, Santa Catalina Ranger District, Santa Catalina Mountains. On road to Mt. Bigelow near Summerhaven on Gen. Hitchcock Road to Mt. Lemmon. Along road just S of the observatory. In grass, under brush or right along roadside under large Ponderosas. Green and yellowed plants. No flowers, but occasional mature fruit. Collected fruit.

PI 641040. Solanum stoloniferum Schltdl. & Bouche
Wild. BFdR 145. Collected 09/26/2005 in Arizona, United States. Latitude 32° 22' 24" N. Longitude 110° 41' 31" W. Elevation 1799 m. Pima County. Coronado National Forest, Santa Catalina Ranger District, Santa Catalina Mountains. On Gen. Hitchcock Road to Mt. Lemmon from Tucson at Bear Canyon campgrounds and picnic area (part on S side of highway). On W side of picnic areas near picnic tables. In moist, black alluvium just N of the (dry) Bear Creek bed, under brush, small oaks and grass. Many very large, robust plants with large dark-green leaves, often with multiple mature berries. Collected fruit.

The following were collected by Margot Stanley, Rutgers University Biological Science, Box 1059, Piscataway, New Jersey 08855-1059, United States. Received 11/12/1993.

PI 641041. Amaranthus cannabinus (L.) J. D. Sauer
Wild. Population. Ames 21669. Collected 09/17/1993 in New Jersey, United States. Latitude 74° 58' 36" N. Longitude 39° 18' 3" W. Elevation 2 m. Near Port Elizabeth, just off route 47. wetland. The plants were very large at the time of collection.

PI 641042. Amaranthus cannabinus (L.) J. D. Sauer
Wild. Population. Ames 21670. Collected 10/11/1993 in New Jersey, United States. Latitude 39° 9' 45" N. Longitude 74° 49' 56" W. Elevation 1 m. Sluice Creek, 16 miles south of Port Elizabeth on route 47. Wetland.

The following were collected by Hassan G. Adewusi, CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria. Donated by CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria. Received 10/22/1998.

PI 641043. Amaranthus cruentus L.
Wild. CEN/IB/97/AMA 003; Ames 25121. Collected 10/14/1997 in Oyo, Nigeria. Latitude 7° 23' N. Longitude 3° 54' E. Aleshinloye Market, Vegetable Farm, New Dugbe Market, Ibadan. Forest-savannah transition.

PI 641044. Amaranthus cruentus L.
Cultivated. CEN/IB/97/AMA 004; Ames 25124. Collected 10/27/1997 in Oyo, Nigeria. Latitude 7° 23' N. Longitude 3° 54' E. CENRAD Headquarters, 5 Akinola Maja Avenue, Jericho Hills, Ibadan. Forest-savannah transition.

PI 641045. Amaranthus cruentus L.
Wild. CEN/IB/97/AMA 005; Ames 25125. Collected 11/03/1997 in Oyo, Nigeria. Latitude 7° 23' N. Longitude 3° 54' E. CENRAD Headquarters, 5 Akinola Maja Avenue, Jericho Hills, Ibadan. Forest-savannah transition. This accession has white seeds which is unusual for wild Amaranthus germplasm. Observed by David Brenner, 2004.

The following were collected by Hassan G. Adewusi, CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria; T.D. Olawuyi, CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria; E.O. Olanrewajn, CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB

5052, Nigeria. Donated by CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria. Received 10/22/1998.

PI 641046. Amaranthus cruentus L.
Wild. CEN/IB/97/AMA 007; Ames 25126. Collected 11/11/1997 in Oyo, Nigeria. Latitude 7° 23' N. Longitude 3° 54' E. Urban Day Secondary School Garden, Jericho Nursing Home Compound, Jericho Hills, Ibadan. Forest-savannah transition.

The following were collected by Hassan G. Adewusi, CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria. Donated by CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria. Received 10/22/1998.

PI 641047. Amaranthus cruentus L.
Wild. CEN/IB/97/AMA 008; Ames 25127. Collected 11/11/1997 in Oyo, Nigeria. Latitude 7° 23' N. Longitude 3° 54' E. CENRAD Headquarters, 5 Akinola Maja Avenue, Jericho Hills, Ibadan. Forest-savannah transition. A white seeded accession that grew to 185 cm, had red striped unbranched stems, red petioles, leaves that were speckled early then became green, and pink infloresences. Most plants did not lodge, and the seeds were mature by August 28. The white seed trait is very unusual for an accession collected as "wild". These observations are from a field planting in 1999, Ames, Iowa, by David Brenner.

PI 641048. Amaranthus viridis L.
Wild. CEN/IB/97/AMA 009; Ames 25128. Collected 01/16/1998 in Oyo, Nigeria. Latitude 7° 23' N. Longitude 3° 54' E. Beside Aleshinloye Central Mosque, Aleshinloye Market, New Dugbe, Ibadan. Derived savannah. A creeping/crawling herb, distance of spread ~10 cm radius. Leaves small, deep green, alternately arranged. Inflorescence spike stem, purplish-red.

The following were collected by Hassan G. Adewusi, CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria; E.A. Ladipo, CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria. Donated by CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria. Received 10/22/1998.

PI 641049. Amaranthus dubius Mart. ex Thell.
Wild. CEN/IB/97/AMA 011; Ames 25129. Collected 01/21/1998 in Oyo, Nigeria. Latitude 7° 23' N. Longitude 3° 54' E. In front of Ajoke International Nursery and Primary School, Jericho Forest, Ibadan. Forest-savannah transition. Spreading herb, pinkish stem, profuse branches, leaves small, petiole long and pinkish, midrib pinkish beneath, veins prominent with alternative arrangement. Inflorescence spike with lots of flowers at the axils. Fruits silvery white.

The following were collected by Hassan G. Adewusi, CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria. Donated by CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria. Received 10/22/1998.

PI 641050. Amaranthus viridis L.
Wild. CEN/IB/97/AMA 012; Ames 25130. Collected 01/20/1998 in Oyo, Nigeria. Latitude 7° 23' N. Longitude 3° 54' E. CENRAD Headquarters, 5 Akinola Maja Avenue, Jericho Hills, Ibadan. Forest transition. Short, erect herb, average plant height ~24 cm. Leaves small and deep green, alternately arranged. Fruit brownish. Stem purplish, ribbed, without branches. Prominent nerves, midrib light green beneath.

The following were collected by Hassan G. Adewusi, CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria; E.A. Ladipo, CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria. Donated by CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria. Received 10/22/1998.

PI 641051. Amaranthus hybridus L.
Wild. CEN/IB/97/AMA 014; Ames 25131. Collected 01/20/1998 in Oyo, Nigeria. Latitude 7° 23' N. Longitude 3° 54' E. Dr. I.T. Ero's Compound, FRIN Quarters, Jericho Area, Ibadan. Forest transition. A creeping herbaceous plant. Stem ribbed, purplish, and branchy. Leaves small, short petiole, vein prominent, light green beneath. Inflorescence spike, few flowers at the axils, and fruits silvery brown.

The following were collected by Hassan G. Adewusi, CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria. Donated by CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria. Received 10/22/1998.

PI 641052. Amaranthus hybridus L.
Wild. CEN/IB/97/AMA 013; Ames 25132. Collected 01/27/1998 in Oyo, Nigeria. Latitude 7° 23' N. Longitude 3° 54' E. Open space garden, beside and opposite The Word Outreach Mission's "School of Missions" off Kudeti Street/Avenue Onireke Gra, Ibadan. An erect, sturdy herb, sometimes robust. Stem reddish, woody, and often branchy. Leaves red, similar to the red eucalypties ornamental.

PI 641053. Amaranthus dubius Mart. ex Thell.
Wild. CEN/IB/97/AMA 006; Ames 25133. Collected 11/03/1997 in Oyo, Nigeria. Latitude 7° 23' N. Longitude 3° 54' E. Office complex of National Centre for Genetic Resources Conservation and Biotechnology (NACGRAB), Moor Plantation, Abeokuta Road, Ibadan. Forest-savannah transition.

PI 641054. Amaranthus dubius Mart. ex Thell.
Wild. CEN/IB/97/AMA 015; Ames 25135. Collected 01/23/1998 in Oyo, Nigeria. Latitude 7° 23' N. Longitude 3° 54' E. Railway station, Dugbe, Ibadan. Forest transition. Glabrous erect herb, height 30 cm. Spineless and pinkish stem, pruplish green towards the base, round, stout branching. Leaves small, normal green, prominent light green nerves/veins beneath. Petiole pinkish at the base, inflorescence spike, flower light green, also found at axils. Fruit silvery brown.

The following were collected by Hassan G. Adewusi, CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria; E.A. Ladipo, CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria. Donated by

CENRAD, 5 Akinola Maja Avenue, Jericho Hills, Ibadan, Oyo PMB 5052, Nigeria. Received 10/22/1998.

PI 641055. Amaranthus viridis L.
Wild. CEN/IB/97/AMA 016; Ames 25136. Collected 01/21/1998 in Oyo, Nigeria. Latitude 7° 23' N. Longitude 3° 54' E. Flat 1, opposite Dr. Ero's Compound, FRIN Quarters, Jericho Area, Ibadan. Forest transition. An erect, small herb. Stem ribbed, purplish with few branches. Leaves green, prominent veins and light green petiole that extends into the midrib.

The following were collected by Armando De Jesus Machado, Universidade do Porto, Instituto de Botanica, Rua do Campo Alegre, 1191, Porto, Porto 4100, Portugal; Jose Loureiro Martins, Universidade do Porto, Instituto de Botanica, Rua do Campo Alegre, 1191, Porto, Porto 4100, Portugal. Donated by Universidade do Porto, Instituto de Botanica, Rua do Campo Alegre, 1191, Porto, Porto 4100, Portugal. Received 06/30/1999.

PI 641056. Amaranthus albus L.
Wild. Index Seminum 2; Ames 25381. Collected 08/17/1998 in Viseu, Portugal. Latitude 41° 7' N. Longitude 7° 47' 30" W. Between Valdigem and Lamego.

The following were developed by Jose Fernandez-Martinez, Instituto de Agricultura Sostenible, Apartado 4084, Alameda del Obispo s/n, Cordoba, Cordoba 14080, Spain; J. Dominguez, CIFA-Junta de Andalucia, Departamento de Mejora y Agronomia, Apartado 4240, Cordoba, Cordoba, Spain; J. Munoz-Ruz, Instituto de Agricultura Sostenible, Dept. de Mejora y Agronomia, CSIC, Apdo. 4084, E-14080, Cordoba, Cordoba, Spain; B. Perez-Vich, Instituto de Agricultura Sostenible, Apartado 4080, E-14080, Cordoba, Cordoba 14071, Spain; Leonardo Velasco, Institute for Sustainable Agriculture, Alameda del Obispo s/n, Apartado 4084, Cordoba, Cordoba E-14080, Spain. Donated by Leonardo Velasco, Institute for Sustainable Agriculture, Alameda del Obispo s/n, Apartado 4084, Cordoba, Cordoba E-14080, Spain. Received 10/24/2005.

PI 641057. Helianthus annuus L.
Breeding. AM-1. GP-302. Pedigree - Selected from PI 307941 after 5 cycles of head to row selection for resistance to race F of broomrape. AM-1 was evaluated together with the original population PI 307941 for broomrape race F reaction in a replicated field trial conducted in 2005 using artificial inoculation. AM-1 showed an incidence of 13.6% with 1.3 +/- 0.7 broomrapes per plant, compared to an incidence of 21.7% with 2.7 +/- 2.0 broomrapes per plant in the original population PI 307941. The susceptible inbred line P1380 was used as check, showing an incidence of 100% with 16.2 +/- 11.7 broomrapes per plant. This germplasm is useful as a genetic source of quantitative genetic resistance to race F of broomrape in sunflower.

PI 641058. Helianthus annuus L.
Breeding. AM-2. GP-303. Pedigree - Selected from PI 431521 after 5 cycles of head ot row selection for resistance to race F of broomrape. Was evaluated together with the original population PI 431521 for broomrape race F reaction in a replicated field trial conducted in 2005 using artificial inoculation. Showed an incidence of 17.9% with 1.9 +/- 1.2 broomrapes per plant, compared to an incidence of 85.2% with 13.4

+/- 11.0 broomrapes per plant in the original population PI 431521. The susceptible inbred line PI 380 was used as check, showing an incidence of 100% with 16.2 +/- 11.7 broomrapes per plant. This germplasm is useful as a genetic source of quantitative genetic resistance to race F of broomrape in sunflower.

PI 641059. Helianthus annuus L.
Breeding. AM-3. GP-304. Pedigree - Selected from Ames 3429 after 5 cycles of head to row selection for resistance to race F of broomrape. Evaluated together with the original population Ames 3429 for broomrape race F reaction in a replicated field trial conducted in 2005 using artificial inoculation. Showed an incidence of 36.2% with 1.8 +/- 0.9 broomrapes per plant, compared to an incidence of 86.8% with 16.3 +/- 11.7 broomrapes per plant in the original population Ames 3429. The susceptible inbred line PI 380 was used as check, showing an incidence of 100% with 16.2 +/- 11.7 broomrapes perplant. This germplasm is useful as a genetic source of quantitative genetic resistance to race F of broomrape in sunflower.

The following were developed by Carol Wilkinson, Virginia Polytechnic Institute, & State University, Southern Piedmont Agric. Exp. Station, Blackstone, Virginia 23824, United States; T.D. Reed, Virginia Polytechnic Institute, & State University, Southern Piedmont Agric. Res. & Ext. Center, Blacksburg, Virginia 23824, United States; W.M. Tilson, Vigrinia Tech southern Piedmont Agric. Res. & Ext. Ctr., 2375 Darvills Road, Blackstone, Virginia 23824, United States. Received 10/31/2005.

PI 641060. Nicotiana tabacum L.
Cultivar. Pureline. "VA 119". CV-123. Pedigree - Coker 371 Gold (PI 552524)/VA 116 (PI 543922). Average yield of 3904 kg ha-1 with an average grade index of 74. About 98.8 cm tall, produces 18.5 harvestable leaves when topped, flowers about 71 d after transplanting, and has about 2.9 ground suckers per 22 plant plot. Average length and width of the top leaf is 63.5 and 27.9 cm, respectively. Average length and width of the middle leaf is 67.8 and 30.9 cm respectively. Average nicotine concentration is 3.64% and reducing sugars average 13.6%. Average percent disease in black shank replicated field tests for VA 119 and K 326 is 72% and 84% respectively. Average percent disease in Granville wilt replicated field tests for VA 119 and K 326 is 45% and 40%, respectively.

The following were developed by B. Badu-Apraku, International Institute of Tropical Agriculture, Ibadan, Oyo, Nigeria; M.A.B. Fakorede, OAU, Ile-Ife, Nigeria. Donated by Baffour Badu-Apraku, International Institute of Tropical Agriculture, c/o L.W. Lambourne & Co., Carolyn House, Cryodon, England CR9 3EE, United Kingdom; J.G. Kling, Oregon State University, Crop Science Building 107, Corvallis, Oregon 97331, United States; A. Menkir, c/o L.W. Lambourn & Co., Carolyn House, 26 Dingwall Road, Croydon, England CR9 3EE, United Kingdom. Received 10/21/2005.

PI 641061. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEI 1. GP-457. Pedigree - TZE-W Pop C0 S6 INB 1-2-4. TZEI1 is tropically adapted early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic weed, Striga hermonthica (Del.) Benth. The inbred line has good levels

of resistance to the maize streak virus (MSV), Puccinia polysora Underw, and Bipolaris maydis (Nisikado & Miyake) Shoemaker. TZEI1 sheds pollen at 55 days, silks at 58 days and has anthesis-silking interval of 3days; plant height of 109 cm and ear height of 56 cm. It has a Striga emergence count of 76 plants per plot (0.75 m x 5 m) and Striga damage syndrome rating of 4 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 1228 kg/ha under Striga-free conditions and 760 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEI 1 is susceptible to drought and has flint/dent grain type.

The following were developed by M.A.B. Fakorede, OAU, Ile-Ife, Nigeria. Donated by Baffour Badu-Apraku, International Institute of Tropical Agriculture, c/o L.W. Lambourne & Co., Carolyn House, Cryodon, England CR9 3EE, United Kingdom; J.G. Kling, Oregon State University, Crop Science Building 107, Corvallis, Oregon 97331, United States; A. Menkir, c/o L.W. Lambourn & Co., Carolyn House, 26 Dingwall Road, Croydon, England CR9 3EE, United Kingdom. Received 10/21/2005.

PI 641062. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEI 2. GP-458. Pedigree - TZE-W Pop x 1368 STR S6 INB 2. TZEI 2 is tropically adapted early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic weed, Striga hermonthica (Del.) Benth. The inbred line has good levels of resistance to the maize streak virus (MSV), Puccinia polysora Underw, and Bipolaris maydis (Nisikado & Miyake) Shoemaker. TZEI 2 sheds pollen at 61 days, silks at 62 days and has anthesis-silking interval of 1day; plant height of 121 cm and ear height of 55 cm. It has a Striga emergence count of 13 plants per plot (0.75 cm x 5 m) and Striga damage syndrome rating of 5 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 2156 kg/ha under Striga-free conditions and 1669 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEI 2 is tolerant to drought and has flint/dent grain type.

PI 641063. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEI 3. GP-459. Pedigree - TZE-W Pop x 1368 STR S6 INB 4. TZEI 3 is tropically adapted early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic weed, Striga hermonthica (Del.) Benth. The inbred line has good levels of resistance to the maize streak virus (MSV), Puccinia polysora Underw, and Bipolaris maydis (Nisikado & Miyake) Shoemaker. TZEI 3 sheds pollen at 53 days, silks at 55 days and has anthesis-silking interval of 2 days; plant height of 114 cm and ear height of 46 cm. It has a Striga emergence count of 7 plants per plot (0.75 cm x 5 m) and Striga damage syndrome rating of 5 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 935 kg/ha under Striga-free conditions and 709 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEI 3 is tolerant to drought and has flint grain type.

PI 641064. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEI 4. GP-460. Pedigree - TZE-W Pop x 1368 STR S6 INB 6. TZEI 4 is tropically adapted early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic weed, Striga hermonthica (Del.) Benth. The inbred line has

good levels of resistance to the maize streak virus (MSV), Puccinia polysora Underw, and Bipolaris maydis (Nisikado & Miyake) Shoemaker. TZEI 4 sheds pollen at 60 days, silks at 61 days and has anthesis-silking interval of 1day; plant height of 121 cm and ear height of 54 cm. It has a Striga emergence count of 48 plants per plot (0.75 cm x 5 m) and Striga damage syndrome rating of 5 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 2260 kg/ha under Striga-free conditions and 1673 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEI 4 is tolerant to drought and has flint grain type.

PI 641065. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEI 5. GP-461. Pedigree - TZE-W Pop x 1368 STR S6 INB 9. TZEI 5 is tropically adapted early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic weed, Striga hermonthica (Del.) Benth. The inbred line has good levels of resistance to the maize streak virus (MSV), Puccinia polysora Underw, and Bipolaris maydis (Nisikado & Miyake) Shoemaker. TZEI 5 sheds pollen at 61days, silks at 62 days and has anthesis-silking interval of 1day; plant height of 114 cm and ear height of 51 cm. It has a Striga emergence count of 34 plants per plot (0.75 cm x 5 m) and Striga damage syndrome rating of 4 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 2068 kg/ha under Striga-free conditions and 1378 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEI is tolerant to drought and has flint grain type.

PI 641066. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEI 6. GP-462. Pedigree - TZE-W Pop x 1368 STR S6 INB 13. TZEI 6 is tropically adapted early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic weed, Striga hermonthica (Del.) Benth. The inbred line has good levels of resistance to the maize streak virus (MSV), Puccinia polysora Underw, and Bipolaris maydis (Nisikado & Miyake) Shoemaker. TZEI 6 sheds pollen at 59days, silks at 63 days and has anthesis-silking interval of 4 days; plant height of 108 cm and ear height of 54 cm. It has a Striga emergence count of 15 plants per plot (0.75 cm x 5 m) and Striga damage syndrome rating of 5 on a scale of 1-9 where 1=little or no damage and 9= severe.

PI 641067. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEI 7. GP-463. Pedigree - WEC STR S7 INB 12. TZEI 7 is tropically adapted early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic weed, Striga hermonthica (Del.) Benth. The inbred line has good levels of resistance to the maize streak virus (MSV), Puccinia polysora Underw, and Bipolaris maydis (Nisikado & Miyake) Shoemaker. TZEI 7 sheds pollen at 58days, silks at 60 days and has anthesis-silking interval of 2 days; plant height of 138 cm and ear height of 70 cm. It has a Striga emergence count of 36 plants per plot (0.75 cm x 5 m) and Striga damage syndrome rating of 5 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 2646 kg/ha under Striga-free conditions and 2025 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEI 7 is susceptible to drought and has flint/dent grain type.

PI 641068. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEI 8. GP-464. Pedigree - TZE-Y Pop C0 S6 INB 62-3-3. TZEI 8 is tropically adapted early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic weed, Striga hermonthica (Del.) Benth. The inbred line has good levels of resistance to the maize streak virus (MSV), Puccinia polysora Underw, and Bipolaris maydis (Nisikado & Miyake) Shoemaker. TZEI 8 sheds pollen at 53 days, silks at 56 days and has anthesis-silking interval of 3 days; plant height of 96 cm and ear height of 46 cm. It has a Striga emergence count of 38 plants per plot (0.75 cm x 5 m) and Striga damage syndrome rating of 4.8 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 613 kg/ha under Striga-free conditions and 563 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEI 8 is susceptible to drought and has flint grain type.

PI 641069. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEI 9. GP-465. Pedigree - TZE-Y Pop C0 S6 INB 66. TZEI 9 is tropically adapted early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic weed, Striga hermonthica (Del.) Benth. The inbred line has good levels of resistance to the maize streak virus (MSV), Puccinia polysora Underw, and Bipolaris maydis (Nisikado & Miyake) Shoemaker. TZEI 9 sheds pollen at 52days, silks at 54 days and has anthesis-silking interval of 2 days; plant height of 106 cm and ear height of 50 cm. It has a Striga emergence count of 34 plants per plot (0.75 cm x 5 m) and Striga damage syndrome rating of 4 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 774 kg/ha under Striga-free conditions and 626 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEI 9 is susceptible to drought and has flint grain type.

PI 641070. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEI 10. GP-466. Pedigree - TZE-Y Pop STR S7 INB 152. TZEI 10 is tropically adapted early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic weed, Striga hermonthica (Del.) Benth. The inbred line has good levels of resistance to the maize streak virus (MSV), Puccinia polysora Underw, and Bipolaris maydis (Nisikado & Miyake) Shoemaker. TZEI 10 sheds pollen at 52 days, silks at 55 days and has anthesis-silking interval of 3 days; plant height of 102 cm and ear height of 43 cm. It has a Striga emergence count of 48 plants per plot (0.75 cm x 5 m) and Striga damage syndrome rating of 4.3 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 1049 kg/ha under Striga-free conditions and 652 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEI 10 is susceptible to drought and has flint grain type.

PI 641071. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEI 11. GP-467. Pedigree - TZE-Comp 5-Y C6 S6 INB 8. TZEI 11 is tropically adapted early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic weed, Striga hermonthica (Del.) Benth. The inbred line has good levels of resistance to the maize streak virus (MSV), Puccinia polysora Underw, and Bipolaris maydis (Nisikado & Miyake) Shoemaker. TZEI 11 sheds pollen at 55days, silks at 57 days and has

anthesis-silking interval of 2 days; plant height of 99 cm and ear height of 50 cm. It has a Striga emergence count of 27 plants per plot (0.75 cm x 5 m) and Striga damage syndrome rating of 4 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 1076 kg/ha under Striga-free conditions and 857 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEI 11 is susceptible to drought and has flint grain type.

PI 641072. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEI 12. GP-468. Pedigree - TZE-Comp 5-Y C6 S6 INB 10. TZEI 12 is tropically adapted early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic weed, Striga hermonthica (Del.) Benth. The inbred line has good levels of resistance to the maize streak virus (MSV), Puccinia polysora Underw, and Bipolaris maydis (Nisikado & Miyake) Shoemaker. TZEI 12 sheds pollen at 55 days, silks at 57 days and has anthesis-silking interval of 2 days; plant height of 101 cm and ear height of 58 cm. It has a Striga emergence count of 19 plants per plot (0.75 cm x 5 m) and Striga damage syndrome rating of 4.5 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 859 kg/ha under Striga-free conditions and 451 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEI 12 is susceptible to drought and has flint grain type.

PI 641073. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEI 13. GP-469. Pedigree - TZE-Comp 5-Y C6 S6 INB 12. TZEI 13 is tropically adapted early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic weed, Striga hermonthica (Del.) Benth. The inbred line has good levels of resistance to the maize streak virus (MSV), Puccinia polysora Underw, and Bipolaris maydis (Nisikado & Miyake) Shoemaker. TZEI 13 sheds pollen at 57days, silks at 59 days and has anthesis-silking interval of 2 days; plant height of 89 cm and ear height of 43 cm. It has a Striga emergence count of 23 plants per plot (0.75 cm x 5 m) and Striga damage syndrome rating of 4.8 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 632 kg/ha under Striga-free conditions and 476 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEI 13 is susceptible to drought and has flint grain type.

PI 641074. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEI 14. GP-470. Pedigree - TZE-Comp 5-Y C6 S6 INB 21. TZEI 14 is tropically adapted early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic weed, Striga hermonthica (Del.) Benth. The inbred line has good levels of resistance to the maize streak virus (MSV), Puccinia polysora Underw, and Bipolaris maydis (Nisikado & Miyake) Shoemaker. TZEI 14 sheds pollen at 56days, silks at 58 days and has anthesis-silking interval of 2 days; plant height of 103 cm and ear height of 54 cm. It has a Striga emergence count of 18 plants per plot (0.75 cm x 5 m) and Striga damage syndrome rating of 4.5 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 1094 kg/ha under Striga-free conditions and 630 kg/ha under artificial infestation with 5,000

germinable seed of S. hermonthica. TZEI 14 is tolerant to drought and has flint grain type.

PI 641075. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEI 15. GP-471. Pedigree - TZE-Comp 5-Y C6 S6 INB 25. TZEI 15 is tropically adapted early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic weed, Striga hermonthica (Del.) Benth. The inbred line has good levels of resistance to the maize streak virus (MSV), Puccinia polysora Underw, and Bipolaris maydis (Nisikado & Miyake) Shoemaker. TZEI 15 sheds pollen at 55days, silks at 59 days and has anthesis-silking interval of 4 days; plant height of 121 cm and ear height of 58 cm. It has a Striga emergence count of 13 plants per plot (0.75 cm x 5 m) and Striga damage syndrome rating of 4 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 1080 kg/ha under Striga-free conditions and 691 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEI 15 is tolerant to drought and has flint grain type.

PI 641076. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEI 16. GP-472. Pedigree - TZE-Comp 5-Y C6 S6 INB 31. TZEI 16 is tropically adapted early maturing; white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic weed, Striga hermonthica (Del.) Benth. The inbred line has good levels of resistance to the maize streak virus (MSV), Puccinia polysora Underw, and Bipolaris maydis (Nisikado & Miyake) Shoemaker. TZEI 16 sheds pollen at 55days, silks at 57 days and has anthesis-silking interval of 2 days; plant height of 106 cm and ear height of 49 cm. It has a Striga emergence count of 16 plants per plot (0.75 cm x 5 m) and Striga damage syndrome rating of 5 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 966 kg/ha under Striga-free conditions and 766 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEI 16 is susceptible to drought and has flint grain type.

The following were collected by Citoyen Nlandu ne Nsaku, Institut de Recherche, Agronomique et Zootechnique (IRAZ), De La C.E.P.G.L., B.P. 91, Gitega, Burundi. Donated by Paul Quek, International Plant Genetics Resources Institute, Regional Office for Asia, the Pacific and Oceania, c/o IDRC, 7th Storey, RELC Building, Singapore. Received 11/29/1994.

PI 641077. Vigna unguiculata (L.) Walp.
GMN 311; Grif 12417. Collected 06/22/1989 in Shaba, Zaire. Latitude 7° 22' S. Longitude 25° 49' E. Elevation 800 m. Marche De Kime.

The following were collected by Craig Sandlin, University of Nebraska, Department of Plant Pathology, Lincoln, Nebraska 68583-0722, United States; Marcelo Salgado, Instituto Nacional de Tecnologia Agropecuaria, C.C. 228, Salta, Salta 4400, Argentina; Roberto Neumann, Instituto Nacional de Tecnologia Agropecuaria, C.C. 228, Salta, Salta 4400, Argentina. Received 1995.

PI 641078. Vigna unguiculata (L.) Walp.
Landrace. W6 17496; Grif 14228. Collected 05/1995 in Bolivia. Elevation

1450 m. Mamora, Bolivia. The house of Sra. Maria Ramirez veuda de Acosta. Not grown at the house where it was obtained. Pedigree - Separated from W6 17495. Mixed landrace.

The following were donated by N. Quat Ng, International Institute of Tropical Agriculture, Oyo Road, PMB 5320, Ibadan, Oyo, Nigeria. Received 09/28/1992.

PI 641079. Vigna unguiculata (L.) Walp. **subsp. unguiculata**
TVu 13723; NVU 15; Grif 12082. Collected in Togo.

PI 641080. Vigna unguiculata (L.) Walp. **subsp. unguiculata**
TVu 13732; NVU 32; Grif 12091. Collected in Togo.

PI 641081. Vigna unguiculata (L.) Walp. **subsp. unguiculata**
TVu 13750; CuCx 154-1E; Grif 12109. Collected in Brazil.

PI 641082. Vigna unguiculata (L.) Walp. **subsp. unguiculata**
TVu 13824; IZ-25; Grif 12179.

PI 641083. Vigna unguiculata (L.) Walp. **subsp. unguiculata**
TVu 13826; G-1; Grif 12181.

The following were collected by Douglas D. Archbold, University of Kentucky, Deptartment of Horticulture, N-318 Agricultural Science Building North, Lexington, Kentucky 40546, United States. Received 01/28/1992.

PI 641084. Fragaria virginiana Mill.
Wild. F. virginiana; Virginia Strawberry; CFRA 1039. Collected 1991 in Kentucky, United States. Latitude 37° 0' N. Longitude 84° 36' W. Bronston, Pulaski County. Pedigree - selected from the wild in Kentucky.

The following were developed by Craig K. Chandler, University of Florida, Gulf Coast Research & Education Center, 14625 CR 672, Wimauma, Florida 33598, United States. Donated by Kevin M. Folta, University of Florida, Plant Molecular and Cellular Biology Program, Horticultural Sciences Department, Gainesville, Florida 32611, United States. Received 06/25/2004.

PI 641085. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Carmine"; FL 95-256; CFRA 1847.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 01/07/2005.

PI 641086. Fragaria chiloensis subsp. pacifica Staudt
Wild. KH 2004-04; CFRA 1872; F. chiloensis subsp. pacifica Coos Bay. Collected 12/28/2004 in Oregon, United States. Pedigree - Collected from the wild in Oregon.

The following were collected by Pavel Cherbukin, Vavilov Research Institute, Far Eastern Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation; Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of

Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation; Luda Popova, Vavilov Research Institute, Far Eastern Experiment Station, Vavilov Road, House #9, Vladivostok, Primorye 690025, Russian Federation. Donated by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 01/29/2004.

PI 641087. Fragaria x ananassa Duchesne ex Rozier
Wild. F. x ananasa escape AS-03-36 AS-03-036; AS-03-036; CFRA 1837. Collected in Sakhalin, Russian Federation. Latitude 46° 57' 37" N. Longitude 142° 46' 16" E. Elevation 178 m. Sakhalin Island, on the outskirts of Ujno-Sakjalinsk city, near the sanitarium called "Mountain Air". Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 641088. Fragaria x ananassa Duchesne ex Rozier
Wild. F. x ananasa escape AS-03-38; AS-03-038; AS-03-38; CFRA 1838. Collected in Sakhalin, Russian Federation. Elevation 0 m. Iturup Island, near the road from Shumi-Gorodok village to to the bridge over the Khvoynaya River. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 641089. Fragaria x ananassa Duchesne ex Rozier
Wild. F. x ananasa escape AS-03-39; AS-03-039; AS-03-39; CFRA 1839. Collected in Sakhalin, Russian Federation. Latitude 45° 1' 56" N. Longitude 147° 45' 20" E. Elevation 53 m. Iturup Island on the outskirts of Goiachie Kluchi village. Pedigree - Collected from the wild in Sakhalin, Russian Federation.

PI 641090. Fragaria nipponica Makino
Wild. F. yezoensis AS-03-40; AS-03-040; AS-03-40; CFRA 1840. Collected 08/03/2003 in Sakhalin, Russian Federation. Elevation 0 m. Iturup Island on Cape Otlivnoy 15km to the south of Shumi-Gorodok village. Pedigree - Collected from the wild on Iturup Island, Russian Federation.

PI 641091. Fragaria iturupensis Staudt
Wild. F. iturupensis AS-03-42; AS-03-042; AS-03-42; CFRA 1841. Collected 08/05/2003 in Sakhalin, Russian Federation. Latitude 44° 47' 48" N. Longitude 147° 11' 34" E. Elevation 630 m. Iturup Island, about half way up the eastern slope of the Volcano Atsunupuri. Pedigree - Collected from the wild on Iturup Island, Russian Federation.

The following were developed by Janet P. Slovin, USDA, ARS, Fruit Laboratory, BLDG 010A BARC-WEST, Beltsville, Maryland 20705-2350, United States. Received 02/08/2005.

PI 641092. Fragaria vesca f. semperflorens (Duchesne) Staudt
Breeding. 5AF7; CFRA 1873; F. vesca f. semperflorens 5AF7. Pedigree - Yellow Wonder self-pollinated F7.

PI 641093. Fragaria vesca f. semperflorens (Duchesne) Staudt
Breeding. 6F7; CFRA 1874; F. vesca f. semperflorens 6F7. Pedigree - Yellow Wonder self-pollinated F7.

The following were donated by Bob Guthrie, 1810 Alameda Street, Roseville, Minnesota 55113, United States. Received 12/09/1999.

PI 641094. Actinidia callosa Lindl.
Wild. A. callosa (female); CACT 125; A. callosa female. Pedigree - Female selection of A. callosa.

PI 641095. Actinidia kolomikta (Maxim. & Rupr.) Maxim.
Cultivar. "Oluyhkos"; "Oluyckos"; CACT 127. Pedigree - Selection of A. kolomikta for high quality fruit.

PI 641096. Actinidia kolomikta (Maxim. & Rupr.) Maxim.
Cultivar. "Urozhainaya"; "Urozainaya"; CACT 129.

PI 641097. Actinidia rufa (Siebold & Zucc.) Planch. ex Miq.
Uncertain. 16A; A. rufa 16A; CACT 117.

PI 641098. Actinidia arguta (Siebold & Zucc.) Planch. ex Miq.
Cultivar. "Cornell"; CACT 121. Developed in United States. Pedigree - Male selection of A. arguta.

The following were donated by Roger Meyer, 16531 Mt. Shelly Circle, Fountain Valley, California 92708, United States. Received 02/14/2002.

PI 641099. Actinidia melanandra Franch.
Cultivated. CACT 182; A. melanandra (female).

The following were collected by Andrey Sabitov, N.I. Vavilov All-Russian Res. Inst. of Plant Industry, Far East Experiment Station, Vavilov Str. 9, Vladivostok, Primorye 690025, Russian Federation. Received 12/07/2001.

PI 641100. Actinidia kolomikta (Maxim. & Rupr.) Maxim.
Wild. HVSC-112; CACT 184; A. kolomikta HVSC-112. Collected in Primorye, Russian Federation. Elevation 0 m. Ussuriysk district, Primorsky. Collected 08/2001 in Primorye, Russian Federation. Elevation 0 m. Ussuriysk district, Primorsky. Pedigree - Collected from the wild in Primorye, Russian Federation.

PI 641101. Actinidia arguta (Siebold & Zucc.) Planch. ex Miq.
Wild. HVSC-115; CACT 186; A. arguta HVSC-115. Collected in Primorye, Russian Federation. Elevation 0 m. Artem vicinity, Primorsky. Collected 08/2001 in Primorye, Russian Federation. Elevation 0 m. Artem vicinity, Primorsky. Pedigree - Collected from the wild in Primorye, Russian Federation.

PI 641102. Actinidia arguta (Siebold & Zucc.) Planch. ex Miq.
Wild. HVSC-117; CACT 188; A. arguta HVSC-117. Collected in Primorye, Russian Federation. Elevation 0 m. Rickarda Island, Primorsky. Collected 08/2001 in Primorye, Russian Federation. Elevation 0 m. Rickarda Island, Primorsky. Pedigree - Collected from the wild in Primorye, Russian Federation.

PI 641103. Actinidia polygama (Siebold & Zucc.) Maxim.
Wild. HVSC-119; CACT 190; A. polygama HVSC-119. Collected in Primorye, Russian Federation. Elevation 0 m. Bogataya River basin near

Vladivostok, Primorsky. Collected 08/2001 in Primorye, Russian Federation. Elevation 0 m. Bogataya River basin near Vladivostok, Primorsky. Pedigree - Collected from the wild in Primorye, Russian Federation.

The following were donated by Roger Meyer, 16531 Mt. Shelly Circle, Fountain Valley, California 92708, United States; Roger Meyer, 16531 Mt. Shelly Circle, Fountain Valley, California 92708, United States. Received 05/14/2001.

PI 641104. Actinidia rubricaulis var. coriacea (Finet & Gagnep.) C. F. Liang
Cultivated. A. rubricaulis var. coriacea; CACT 145.

PI 641105. Actinidia eriantha Benth.
Cultivated. CACT 148; A. eriantha (female). Pedigree - Female selection of A. eriantha.

PI 641106. Actinidia chrysantha C. F. Liang
Cultivated. CACT 154; A. chrysantha (female). Pedigree - Female selection of A. chrysantha.

PI 641107. Actinidia eriantha Benth.
Cultivated. CACT 180; A. eriantha (male). Pedigree - Male selection of A. eriantha.

PI 641108. Actinidia chrysantha C. F. Liang
Cultivated. CACT 181; A. chrysantha (male). Pedigree - Male selection of A. chrysantha.

PI 641109. Actinidia latifolia (Gardner & Champ.) Merr.
Cultivated. CACT 183; A. latifolia (male).

The following were donated by Roger Meyer, 16531 Mt. Shelly Circle, Fountain Valley, California 92708, United States. Received 03/04/2005.

PI 641110. Actinidia fulvicoma var. lanata (Hemsl.) H. L. Li
Cultivated. FL01_01; A. fulvicoma var. lanata FL01_01; CACT 205. Pedigree - Male selection of A. fulvicoma var. lanata.

PI 641111. Actinidia lanceolata Dunn
Cultivated. LB01_03; A. lanceolata LB01_03; CACT 206.

PI 641112. Actinidia arguta var. purpurea (Rehder) C. F. Liang
Cultivated. AE01_01; A. arguta var. purpurea AE01_01; CACT 207. Pedigree - Male selection of A. arguta var. purpurea.

PI 641113. Actinidia polygama (Siebold & Zucc.) Maxim.
Cultivated. PC03_02; A. polygama PC03_02; CACT 208.

PI 641114. Actinidia melanandra Franch. **var. melanandra**
Cultivated. ME06_01; A. melandra ME06_01; CACT 209.

PI 641115. Actinidia polygama (Siebold & Zucc.) Maxim.
Cultivated. PC11_01; A. polygama PC11_01; CACT 210.

PI 641116. Actinidia polygama (Siebold & Zucc.) Maxim.
Cultivated. PC09_02; A. polygama PC09_02; CACT 211.

The following were donated by Roger Meyer, 16531 Mt. Shelly Circle, Fountain Valley, California 92708, United States; Roger Meyer, 16531 Mt. Shelly Circle, Fountain Valley, California 92708, United States. Received 03/04/2005.

PI 641117. Actinidia glaucophylla var. robusta C. F. Liang
Cultivated. GD01_06; A. glaucophylla var. robusta GD01_06; CACT 212. Pedigree - Male selection of A. glaucophylla var. robusta.

PI 641118. Actinidia indochinensis Merr.
Cultivated. IA01_02; A. indochinensis IA01_02; CACT 213. Pedigree - Female selection of A. indochinensis.

The following were donated by Roger Meyer, 16531 Mt. Shelly Circle, Fountain Valley, California 92708, United States. Received 03/04/2005.

PI 641119. Actinidia rufa (Siebold & Zucc.) Planch. ex Miq.
Cultivated. RE01_02; A. rufa RE01_02; CACT 214.

PI 641120. Actinidia setosa (H. L. Li) C. F. Liang & A. R. Ferguson
Cultivated. SB01_01; A. setosa SB01_01; CACT 215.

PI 641121. Actinidia lanceolata Dunn
Cultivated. LB01_01; A. lanceolata LB01_01; CACT 216.

PI 641122. Actinidia latifolia (Gardner & Champ.) Merr. **var. latifolia**
Cultivated. LC01_14; A. latifolia LC01_14; CACT 217.

PI 641123. Actinidia setosa (H. L. Li) C. F. Liang & A. R. Ferguson
Cultivated. CACT 218; A. setosa.

PI 641124. Actinidia glaucocallosa C. Y. Wu
Cultivated. CACT 219; A. glaucophylla. Pedigree - Female selection of A. glaucophylla.

PI 641125. Actinidia melanandra Franch.
Cultivated. CACT 220; A. melanandra.

PI 641126. Actinidia sp.
Cultivated. Hairy Hemslyana; CACT 221. Pedigree - Selection of A. hemslyana.

The following were donated by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Nana Mirotadze, Institute of Horticulture, Vitculture and Wine-Making, 6 Gelovani Street, Tbilisi, Georgia. Received 03/08/2002.

PI 641127. Corylus avellana L.
Cultivar. "Ashrafi"; CCOR 770. Pedigree - cultivated selection from Georgia. Ashrafi (=KTH-30-B) - This is an Azerbaijanian variety of filbert of popular selection, that has been cultivated in Georgia since

1957. The bush is vigorous. The nut is large, measuring 1.6 x 1.7 x 1.5 cm, round, compressed from the sides and weighing averagely 2.2 g; there are 260 nuts to a kilogram. The shell is slightly costate, medium brittle and thick (0.2-1.0 cm). The kernel accounts for 45-48% of nut weight and contains 67.5% oil. The nuts ripen rather late, viz. at the end of September. The variety is noted for high productivity and regular annual crops, as well as for adaptability to climatic conditions, which makes it appreciably industrially. -- -- from a book at the Institute of Horticulture, Viticulture and Wine Making, photocopied by M.M. Thompson during her visit in March, 2002.

PI 641128. Corylus avellana L.
Cultivar. "Kudriavchik"; CCOR 772. Pedigree - selection from Georgia. Kudryavchik (curly) - This variety of filbert occurs under the synonyms Kerasund Round, Uchatkhili, and in Turkey it is known as Tambul. It was imported into Georgia from Turkey in 1900, occurs in the Gagra, Lagodekhi, and Sukhumi Districts of the Georgian SSR, where it has been officially endorsed for cultivation (1963). The bush is medium. The involucre is slightly longer tha the nut, and as the latter ripens the former curls up (hence the name). The nuts grow in foursomes, fivesomes, etc. up to ten in a cluster. The nuts are small, measuring 1.8 x 1.7 x 1.6 cm, glossy, oval in shape, slightly costate. the shell is thin, light-brown, with darker stripes. the average weight of a nut is 1.7 g, and it takes from 400-430 nuts to make one kilogram. The kernel makes 47.2% of a nut, weight and contains 70.2% of oil. The nuts ripen in the middle of July; the crops are regular. -- from a book at the Institute of Horticulture, Viticulture and Wine Making, photocopied by M.M. Thompson during her visit in March, 2002. Handwritten note on translation: Kudryavchik is similar to 'Tombul', a leading cultivar in Turkey.

PI 641129. Corylus avellana L.
Cultivar. "Izyum Shakar"; CCOR 773. Pedigree - selection from Georgia. Izyum Shakar (=KX-29) - This variety of filbert occurs under different synonyms: Kakhian-29 or K-kh-29. It is an Azerbaijanian variety of popular selection and has been under testing in Georgia since 1957. The bush is spreading, medium dense; the coppice shoots are not so numerous; the productivity is low and crops are periodic. The nut is of medium size, measuring 2.0 x 1.8 x 1.6 cm, yellow-gray, with a thick shell. The average weight of one nut is 2.0 g and it takes 492 nuts to make one kilogram. The involucre is slightly longer than the nut and covered with pubescence. the kernel makes 46% of nut weight and contains 65.2% of oil. The nuts ripen at the end of August - beginning of September. -- from a book at the Institute of Horticulture, Viticulture and Wine Making, photocopied by M.M. Thompson during her visit in March, 2002.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 04/04/2002.

PI 641130. Corylus avellana L.
Cultivar. CCOR 774. Pedigree - Montebello x Gasaway.

PI 641131. Corylus avellana L.
Cultivar. CCOR 775. Pedigree - OSU 10-68 (Barcelona x Compton) x Gasaway.

PI 641132. Corylus avellana L.
Cultivar. OSU 681.043; CCOR 781; C. avellana OSU 681.043 Akcakoca.
Pedigree - Collected from the western Black Sea coast near Akcakoca, Turkey.

PI 641133. Corylus avellana L.
Cultivar. OSU 681.048; CCOR 782; C. avellana OSU 681.048 Akcakoca.
Pedigree - Collected from the western Black Sea coast near Akcakoca, Turkey.

PI 641134. Corylus avellana L.
Cultivar. OSU 681.074; CCOR 783; C. avellana OSU 681.074 Akcakoca.
Pedigree - Collected from the western Black Sea coast near Akcakoca, Turkey.

PI 641135. Corylus avellana L.
Cultivar. OSU 686.058; CCOR 784; C. avellana OSU 686.058 Akcakoca.
Pedigree - Collected from the western Black Sea coast near Akcakoca, Turkey.

PI 641136. Corylus avellana L.
Cultivar. OSU 686.124; CCOR 785; C. avellana OSU 686.124 Giresun-Ordu.
Pedigree - Collected from the central Black Sea coast near Giresun-Ordu, Turkey.

PI 641137. Corylus avellana L.
Cultivar. OSU 687.019; CCOR 786; C. avellana OSU 687.019 Trabzon.
Pedigree - Collected from the eastern Black Sea coast near Trabzon, Turkey.

PI 641138. Corylus avellana L.
Cultivar. OSU 687.023; CCOR 787; C. avellana OSU 687.023 Trabzon.
Pedigree - Collected from the eastern Black Sea coast near Trabzon, Turkey.

PI 641139. Corylus avellana L.
Cultivar. OSU 687.053; CCOR 788; C. avellana OSU 687.053 Trabzon.
Pedigree - Collected from the eastern Black Sea coast near Trabzon, Turkey.

PI 641140. Corylus avellana L.
Cultivar. OSU 687.077; CCOR 789; C. avellana OSU 687.077 Trabzon.
Pedigree - Collected from the eastern Black Sea coast near Trabzon, Turkey.

PI 641141. Corylus avellana L.
Cultivar. OSU 687.125; CCOR 790; C. avellana OSU 687.125 Trabzon.
Pedigree - Collected from the eastern Black Sea coast near Trabzon, Turkey.

PI 641142. Corylus avellana L.
Cultivar. OSU 693.073; CCOR 792; C. avellana OSU 693.073 Cen. Black Sea.
Pedigree - Collected from the central Black Sea coast, Turkey.

PI 641143. Corylus avellana L.
Cultivar. OSU 693.109; CCOR 793; C. avellana OSU 693.109 Cen. Black Sea.
Pedigree - Collected from the central Black Sea coast, Turkey.

PI 641144. Corylus avellana L.
Cultivar. OSU 693.121; CCOR 795; C. avellana OSU 693.121 East Black Sea E. Pedigree - Collected from the eastern Black Sea coast, Turkey.

PI 641145. Corylus avellana L.
Cultivar. OSU 702.004; CCOR 796; C. avellana OSU 702.004 East Black Sea. Pedigree - Collected from the eastern Black Sea coast, Turkey.

PI 641146. Corylus avellana L.
Cultivar. OSU 702.031; CCOR 797; C. avellana OSU 702.031 East Black Sea. Pedigree - Collected from the eastern Black Sea coast, Turkey.

PI 641147. Corylus avellana L.
Cultivar. OSU 702.037; CCOR 798; C. avellana OSU 702.037 East Black Sea. Pedigree - Collected from the eastern Black Sea coast, Turkey.

PI 641148. Corylus avellana L.
Cultivar. OSU 702.041; CCOR 799; C. avellana OSU 702.041 East Black Sea. Pedigree - Collected from the eastern Black Sea coast, Turkey.

PI 641149. Corylus avellana L.
Cultivar. OSU 723.042; CCOR 800; C. avellana OSU 723.042 East Black Sea. Pedigree - Collected from the eastern Black Sea coast, Turkey.

The following were collected by Mary Harris, 717 Buchanan St., Carthage, Illinois 62321-1403, United States. Donated by George A. White, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616, United States. Received 08/31/2004.

PI 641150. Corylus americana Marshall
Cultivated. C. americana Plymouth, Illinois; CCOR 847. Collected 08/25/2004 in Illinois, United States. Pedigree - Collected from a residence in Plymouth, Illinois.

The following were collected by Paul Meyer, The University of Pennsylvania, Morris Arboretum, 9414 Meadowlark Avenue, Philadelphia, Pennsylvania 19118, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Marine Mosulishvili, Plant Systematics, Institute of Botany, Georgian Academy of Sciences, Kojori road 1, Tbilisi, Georgia; Giorgi Arabuli, State Museum of Georgia, Tbilisi, Georgia. Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/26/2004.

PI 641151. Corylus avellana L.
Wild. GE-2004-049; CCOR 848. Collected 09/26/2004 in Georgia. Pedigree - Collected from the wild in the Republic of Georgia.

PI 641152. Corylus colurna L.
Cultivated. GE-2004-054; CCOR 849. Collected 09/27/2004 in Georgia. Pedigree - Cultivated, of wild origin in the Republic of Georgia.

PI 641153. Corylus avellana L.
Wild. GE-2004-055; CCOR 850. Collected 09/28/2004 in Georgia. Pedigree - Collected from the wild in the Republic of Georgia.

PI 641154. Corylus avellana L.
Wild. GE-2004-074; CCOR 851. Collected 10/01/2004 in Georgia. Pedigree - Collected from the wild in the Republic of Georgia.

The following were donated by David C. Smith, Oregon State Universtiy, Department of Horticulture, 4017 Ag and Life Sciences Bldg., Corvallis, Oregon 97331, United States. Received 03/10/2005.

PI 641155. Corylus americana Marshall
Cultivar. "Yoder No.5"; CCOR 853; Corylus americana hybrid - Yoder No.5.

The following were developed by Tommy E. Carter, USDA-ARS, Soybean and Nitrogen Fixation Research, 3127 Ligon Street, Raleigh, North Carolina 27607, United States; Joe W. Burton, USDA-ARS, Plant Science Research Building, 3127 Ligon Street, Raleigh, North Carolina 27607, United States; Daryl T. Bowman, North Carolina State University, Department of Crop Science, Box 8604, Raleigh, North Carolina 27695-8604, United States; Myron Fountain, USDA - ARS, 3127 Ligon St., Raleigh, North Carolina 27607, United States. Received 11/16/2005.

PI 641156. Glycine max (L.) Merr.
Cultivar. Pureline. "NC-Raleigh"; SY 517001. CV-485. Pedigree - NC-Raleigh is an F5-derived selection from the cross of USDA breeding line N85-492 and USDA germplasm release N88-480. N85-492 was derived from N77-179 x 'Johnston'. N77-179 was selected from the cross of N70-1549 x N72-3213. N70-1549 was developedfrom the cross of 'Dare' x D65-6765. D65-6765 was derived from D58-3358 x D59-9289. D58-3358 was derived from 'Jackson'(4) x D49-2491. D49-2491 was a sister line of 'Lee', developed from the cross of 'S-100' x 'CNS'. D59-9289 was developed from the cross of D51-4877 x D55-4168. D51-4877 was derived from the cross of 'Roanoke' x N45-745. N45-745 was derived from 'Ogden' x CNS. D55-4168 was derived from the cross of Ogden x 'Biloxi'. N72-3213 was derived from the cross of D67-B5 x D64-2451. D67-B5 was derived from D62-7816 x Lee. D62-7816 was derived from D49-2491(5) x PI181537. D64-2451 was a sister line of 'Ransom'. The paternal parent of NC-Raleigh was N88-480, an F3 derived breeding line selected from the fourth cycle of a recurrent selection population improvement program for higher seed oil concentration. The parents of the original population were 'Arksoy', Ogden, Lee, Roanoke, D60-8107, Jackson, and N69-2774 (USDA-ARS, 2005e). D60-8017 was derived from the cross of D51-4877 x D55 -4168. D51-4877 was derived from Roanoke x N45-745. N69-2774 is the original maintainer source for the male sterile gene of unknown pedigree . NC-Raleigh has excellent yield potential, small seed, high oil concentration, and resistance to soybean mosaic virus, stem canker, bacterial pustule and frogeye leaf spot. It is a determinant group VII maturity soybean variety adapted to the southern USA, 27 - 37 degrees N latitude. The plant height of NC-Raleigh is about 86 cm. Approximate seed protein and oil concentrations of NC-Raleigh are 401 and 211 g/kg. The 100-seed weight is 13.1 g. NC-Raleigh has white flowers, tawny pubescence, hila color varies (black and brown), and tan pod wall color. It was rated susceptible to soybean cyst and root-knot nematodes.

The following were developed by F.M. Bourland, University of Arkansas, Northeast Research and Ext. Center, P.O. Box 48, Keiser, Arkansas 72351, United States; D.C. Jones, Cotton Incorporated, 6399 Weston Parkway, Cary, North Carolina 27513, United States. Received 11/04/2005.

PI 641157. Gossypium hirsutum L.
Breeding. Pureline. Arkot 9203-03. GP-853. Pedigree - H-1330 / Delcot 344. Morphological traits of Arkot 9203-03 are similar to SG 105 and DP 444 BG/RR (check cultivars) except that Arkot 9203-03 has denser leaf pubescence and was slightly taller. Over 18 replicated field tests in Arkansas, lint yields of Arkot 9203-03 were 10% higher than the check cultivars. The higher yields of Arkot 9203-03 were associated with producing more seed per area than the check cultivars. Compared to these check cultivars, Arkot 9203-03 tended to have similar lint fraction, seed index, lint index, fiber length, micronaire, and higher fiber strength and slightly lower fiber elongation. Arkot 9203-03 is resistant to all U.S. races of Xanthomonas campestris pv. malvacearum, the causal agent of bacterial blight. Resistance to fusarium wilt caused by Fusarium oxysporum sp. vasinfectum was equal to a known resistant check. Arkot 9203-03 demonstrated an intermediate level of resistance to tarnished plant bug [Lygus lineolaris].

PI 641158. Gossypium hirsutum L.
Breeding. Pureline. Arkot 9203-17. GP-854. Pedigree - H-1330 / Delcot 344. Morphological traits of Arkot 9203-17 are similar to SG105 and DP444 BG/RR (check cultivars) except that Arkot 9203-17 has denser leaf pubescence and was slightly taller. Lint yields of Arkot 9203-17 were equal to the check cultivars over 18 replicated field tests in Arkansas, but exceeded SG 105 over two years at Tifton, GA. Arkot 9203-17 is resistant to all U.S. races of Xanthomonas campestris pv. malvacearum, the causal agent of bacterial blight. Resistance to fusarium wilt [caused by Fusarium oxysporum] was equal to a known resistant check. Arkot 9203-17 demonstrated an intermediate level of resistance to tarnished plant bug [Lygus lineolaris].

PI 641159. Gossypium hirsutum L.
Breeding. Pureline. Arkot 9202. GP-858. Pedigree - GA 88-166 / H 1330. Morphological traits of Arkot 9202 are similar to SG105 and DP444 BG/RR (check cultivars) except that Arkot 9202 has hairy leaf pubescence and was slightly taller. Over 18 replicated field tests in Arkansas, lint yields of Arkot 902 were equal to the check cultivars and tended to yield relatively better in north than south Arkansas locations. Compared to these check cultivars, Arkot 9202 tended to have higher lint fraction and fiber strength; similar lint index and fiber length; and lower seed index, micronaire, and fiber elongation. Arkot 9202 is resistant to all U.S. races of Xanthomonas campestris pv. malvacearum, the causal agent of bacterial blight. Resistance to fusarium wilt [Fusarium oxysporum sp. vasinfectum] was equal to a known resistant check.

PI 641160. Gossypium hirsutum L.
Breeding. Pureline. Arkot 9208. GP-859. Pedigree - GA 88-166 // Miscot 7853 / Miscot 7918. Morphological traits of Arkot 9208 are similar to SG105 and DP 444 BF/RR (check cultivars) except that Arkot 9208 has moderately hairy leaf pubescence and was slightly taller. Over 18 replicated field tests in Arkansas, lint yields of Arkot 9208 were equal

to the check cultivars and tended to yield relatively better in south than in north Arkansas locations. Compared to these check cultivars, Arkot 9208 tended to have higher fiber strength, seed index and fiber length values; similar lint index, micronaire, and fiber elongation; and lower lint fraction. Arkot 9208 is resistant to all U.S. races of Xanthomonas campestris pv. malvacearum, the causal agent of bacterial blight and demonstrated intermediate levels of resistance to Verticillium wilt (Verticillium dahliae) and tarnished plant bug [Lygus lineolaris].

The following were developed by James M. Stewart, University of Arkansas, Department of Crop, Soil, & Environmental Sciences, Fayetteville, Arkansas 72701, United States; F.M. Bourland, University of Arkansas, Northeast Research and Ext. Center, P.O. Box 48, Keiser, Arkansas 72351, United States; D.C. Jones, Cotton Incorporated, 6399 Weston Parkway, Cary, North Carolina 27513, United States. Received 11/04/2005.

PI 641161. Gossypium hirsutum L.
Breeding. Pureline. Arkot S23-1. GP-855. Pedigree - Selected from a mixed population of germplasm derived from a cross between a synthetic allotetraploid (made by hybridization of G. arboreum A2-026 and G. armourianum followed by doubling of the chromosome number with colchicine) and G. hirsutum 'Hancock'. With its trispecies background, Arkot S23-1 expands the germplasm diversity of Upland cotton. Morphological traits of Arkot S23-1 are similar to SG105 and PSC 355 (check cultivars) except that Arkot S23-1 was slightly taller, later maturing, and possesses yellow pollen. Its leaf pubescence is near intermediate to the two check cultivars. Over 9 replicated field tests in Arkansas, lint yields of Arkot S23-1 were intermediate to the check cultivars. Compared to these check cultivars, Arkot S23-1 tended to have higher lint fraction, lint index, and micronaire; similar seed index, and lower fiber strength, fiber length and fiber elongation. Arkot S23-1 demonstrated significantly higher levels of resistance to tarnished plant bug [Lygus lineolaris] and to Rhizoctonia solani than SG 105.

PI 641162. Gossypium hirsutum L.
Breeding. Pureline. Arkot S23-2. GP-856. Pedigree - Selected from a mixed population of germplasm derived from a cross between a synthetic allotetraploid (made by hybridization of G. arboreum A2-026 and G. armourianum followed by doubling of the chromosome number with colchicine) and G. hirsutum 'Hancock'. With its trispecies background, Arkot S23-2 expands the germlasm diversity of Upland cotton. Morphological traits and height of Arkot S23-2 are similar to SG105 and PSC 355 (check cultivars) except that Arkot S23-2 is earlier maturing. Its leaf pubescence is similar to SG 105. Over 9 replicated field tests in Arkansas, lint yields of Arkot S23-2 were intermediate to the check cultivars. Compared to these check cultivars, Arkot S23-2 tended to have higher lint fraction, lint index, fiber elongation, and micronaire; lower seed index, fiber strength, and fiber length. Arkot S23-2 demonstrated significantly higher levels of resistance to tarnished plant bug [Lygus lineolaris] and to Rhizoctonia solani than SG 105.

PI 641163. Gossypium hirsutum L.
Breeding. Pureline. Arkot S23-4. GP-857. Pedigree - Selected from a mixed population of germplasm derived from a cross between a synthetic allotetraploid (made by hybridization of G. arboreum A2-026 and G.

armourianum followed by doubling of the chromosome number with colchicine) and g. hirsutum 'Hancock'. With its trispecies background, Arkot S23-4 expands the germplasm diversity of Upland cotton. Morphological traits and height of Arkot S23-4 are similar to SG105 and PSC 355 (check cultivars) except that Arkot S23-4 is earlier maturing. Its leaf pubescence is similar to SG 105. Over 9 replicated field tests in Arkansas, lint yields of Arkot S23-4 were intermediate to the check cultivars. Compared to these check cultivars, Arkot S23-4 tended to have higher lint fraction, lint index, and micronaire; similar fiber elongation; and lower seed index, fiber strength, and fiber length. Arkot S23-4 demonstrated similar levels of resistance to tarnished plant bug [Lygus lineolaris] and to Rhizoctonia solani as did SG 105.

The following were developed by Richard W. Ward, Michigan State University, Dept. of Crop & Soil Sciences, 382 Plant & Soil Sciences, East Lansing, Michigan 48824, United States; Guo-Liang Jiang, Nanjing Agricultural University, Wheat Research Laboratory, Nanjing, Jiangsu 210095, China; DeChong Huang, Shanghai Academy of Agricultural Sciences, Institute of Plant Protection, Shanghai, Shanghai, China; QiuQuan Shen, Zhejiang Academy of Agricultural Sciences, Institute of Crop Sciences, Hangzhou, Zhejiang, China; ZhanLin Yang, Anhui Academy of Agricultural Sciences, Institute of Crop Sciences, Hefei, Anhui, China; WeiZhong Lu, Jiangsu Academy of Agricultural Sciences, Nanjing, Jiangsu 210014, China; Jianrong Shi, Jiangsu Academy of Agricultural Sciences, Nanjing, Jiangsu 210014, China; Han Zhu, Nanping Institute of Agricultural Sciences, Jianyang, Fujian, China; ZhaoXia Chen, Nanjing Agricultural University, Wheat Research Laboratory, Nanjing, Jiangsu 210095, China. Donated by Guo-Liang Jiang, Michigan State University, Dept. of Crop & Soil Science, East Lansing, Michigan 48824, United States. Received 10/26/2005.

PI 641164. Triticum aestivum L. **subsp. aestivum**

Breeding. Pureline. W14; CJ W14. GP-808. Pedigree - Originally derived from a C3 population of scab-resistant gene pool generated by intermating among hybrids and progenies of 75 crosses with five agronomic parents (Yangmai 4, Ningmai 3, Zhemai 1, Qianjiang 1 and Wanjian 7909) crossed to each of 15 scab-resistant and/or complementary parents (Sumai 3, Ning 7840, Wangshuibai, Whengzhouhongheshang, Fanshaxiaomai, Emai 9, Zhen 7495, Jinzhou 1, Xiangmai 1, Nobeokabouzu-Komogi, Shinchunaga, Qianhuan 803, 089xAvrora, Frontana and Veery), with the aid of a dominant male-sterile gene Ta1 (ms2), and bulking the seeds from the male-sterile plants, followed by recurrent selection. Awned, semi-dwarf and red-grained spring types with red glumes. Has high levels of resistance to Fusarium head blight (FHB or scab) caused by Fusarium graminearum. Scores for disease severity (such as number of scabby spikelets) under single-floret inoculation were consistently lower than the resistant check Sumai 3 or Ning 7840. Superior to Sumai 3 in the resistance to disease spread and has a better general combining ability. Compared with Sumai 3, the agronomic traits of CJ W14 are significantly improved. Under field conditions at Nanjing, China, its plant height was around 90 cm (30 cm shorter than Sumai 3). The spike length, spikelets and kernels per spike were around 11 cm, 22 and 38-42, respectively, and 10 cm, 21, and 34-36 for Sumai 3. The grains are red, oval, semi-soft and plump. The 1000-kernel and test/volume tests were 34 g and 756 g/l, better than those of Sumai 3 (33 g and 750 g/l). The biomass/stalk, grain yield/spike and harvest index were 3.5 g, 1.4 g and 39.7%, compared to Sumai 3 (3.2 g, 1.1 g and

35.1%). It was 1-2 days earlier in heading or flowering and more resistant to lodging than Sumai 3 and Yangmai 5 (widely grown in China). Has moderate reactions to rusts and powdery mildew.

PI 641165. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. CJ 9306; Changjiang 9306. GP-809. Pedigree - Originally derived from a C3 population of scab-resistant gene pool generated by intermating among hybrids and progenies of 75 crosses with five agronomic parents (Yangmai 4, Ningmai 3, Zhemai 1, Qianjiang 1 and Wanjian 7909) crossed to each of 15 scab-resistant and/or complementary parents (Sumai 3, Ning 7840, Wangshuibai, Whengzhouhongheshang, Fanshanxiaomai, Emai 9, Zhen 7495, Jinzhou 1, Xiangmai 1, Nobeokabouzu-Komogi, Shinchunaga, Qianhuan 803, 089xAvrora, Frontana and Veery), with the aidof a dominant male-sterile gene Ta1 (ms2), and bulking the seeds from the male-sterile plants, followed by recurrent selection. Awned, semi-dwarf and red-grained spring type with red glumes. Has a high level of resistance to Fusarium head blight (FHB or scab) caused by Fusarium graminearum. Scores for disease severity (such as number of scabby spikelets) under single-floret inoculation were consistently lower than the resistant check Sumai 3 or Ning 7840. Under a natural epidemic of scab, CJ 9306 scores for disease index were near Sumai 3 scores. Is superior to Sumai 3 in the resistance to disease spread of wheat scab, and is similar to Sumai 3 in comprehensive resistance. Under field conditions at Nanjing, China, its plant height was around 90 cm (30 cm shorter than Sumai 3). The spike length, spikelets and kernels per spike were around 11 cm, 22 and 38-40, respect ively (10 cm, 21 and 34-36 for Sumai 3). Grains are red. oval, semi-soft and plump. 1000 kernel and test weights were 34 g and 756 g/l, better than those of Sumai 3 (33 g and 750 g/l). Biomass per stalk, grain yield/spike and harvest index were 3.5 g, 1.4 g and 39.7%, compared to Sumai 3 (3.2 g, 1.1 g and 35.1%). Duration of growth is around 210 days in Nanjing, and 100-110 days in greenhouse. Had earlier maturity (1-2 d) and stronger lodging resistance than Sumai 3. Moderate to rusts and powdery mildew.

PI 641166. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. CJ 9311; Changjiang 9311. Pedigree - Originally derived from a C3 population of scab-resistant gene pool generated by intermating among hybrids and progenies of 75 crosses with five agronomic parents (Yangmai 4, Ningmai 3, Zhemai 1, Qianjiang 1 and Wanjian 7909) crossed to each of 15 scab-resistant and/or complementary parents (Sumai 3, Ning 7840, Wangshuibai, Whengzhouhongheshang, Fanshanxiaomai, Emai 9, Zhen 7495, Jinzhou 1, Xiangmai 1, Nobeokabouzu-Komogi, Shinchunaga, Qianhuan 803, 089xAvrora, Frontana and Veery), with the aidof a dominant male-sterile gene Ta1 (ms2), and bulking the seeds from the male-sterile plants, followed by recurrent selection. Awned, semi-dwarf and red-grained spring type with red glumes. Has a high level of resistance to Fusarium head blight (FHB or scab) caused by Fusarium graminearum. Scores for disease severity (such as number of scabby spikelets) under single-floret inoculation were consistently lower than the resistant check Sumai 3 or Ning 7840. Under a natural epidemic of scab, CJ 9311 scores for disease index were close to those for Sumai 3. Superior to Sumai 3 in the resistance to disease spread of wheat scab, and has similar comprehensive resistance to Sumai 3. Under field conditions at Nanjing, China, plant height was around 90 cm (30 cm shorter than Sumai 3). Spike length, spikelets and kernels per spike were around 11 cm, 21-22 and 38-39, respectively (10 cm, 21 and

34-36 for Sumai 3). Grains are red, oval, semi-soft and plump. 1000 kernel and volume weights were 34 g and 756 g/l, better than those of Sumai 3 (33 g and 750 g/l). Biomass per stalk, grain yield/spike and harvest index were 3.5 g, 1.4 g and 39.7%, compared to Sumai 3 (3.2 g, 1.1 g and 35.1%). Duration of growth is around 210 d in Nanjing. Was 1-2 d earlier in heading/flowering and more lodging-resistant than Sumai 3. Was moderate to rusts and powdery mildew.

The following were developed by Richard W. Ward, Michigan State University, Dept. of Crop & Soil Sciences, 382 Plant & Soil Sciences, East Lansing, Michigan 48824, United States; Guo-Liang Jiang, Nanjing Agricultural University, Wheat Research Laboratory, Nanjing, Jiangsu 210095, China; QiuQuan Shen, Zhejiang Academy of Agricultural Sciences, Institute of Crop Sciences, Hangzhou, Zhejiang, China; ZhanLin Yang, Anhui Academy of Agricultural Sciences, Institute of Crop Sciences, Hefei, Anhui, China; WeiZhong Lu, Jiangsu Academy of Agricultural Sciences, Nanjing, Jiangsu 210014, China; ZhaoXia Chen, Nanjing Agricultural University, Wheat Research Laboratory, Nanjing, Jiangsu 210095, China; Yong Xu, Nanjing Agricultural University, Wheat Research Laboratory, Nanjing, Jiangsu 210095, China. Donated by Guo-Liang Jiang, Michigan State University, Dept. of Crop & Soil Science, East Lansing, Michigan 48824, United States. Received 10/26/2005.

PI 641167. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. CJ 9403; Changjiang 9403. GP-810. Pedigree - Originally derived from a C2 population of scab-resistant gene pool generated by intermating among hybrids and progenies of 75 crosses with five agronomic parents (Yangmai 4, Ningmai 3, Zhemai 1, Qianjiang 1 and Wanjian 7909) crossed to each of 15 scab-resistant and/or complementary parents (Sumai 3, Ning 7840, Wangshuibai, Whengzhouhongheshang, Fanshanxiaomai, Emai 9, Zhen 7495, Jinzhou 1, Xiangmai 1, Nobeokabouzu-Komogi, Shinchunaga, Qianhuan 803, 089xAvrora, Frontana and Veery), with the aidof a dominant male-sterile gene Ta1 (ms2), and bulking the seeds from the male-sterile plants, followed by recurrent selection. Awned, semi-dwarf and red-grained spring type with spindle-shaped spikes and white glumes. Has excellent resistance to Fusarium head blight (FHB or scab) caused by Fusarium graminearum. Scores for number of scabby spikelets under single-floret inocluation were close to or slightly higher than the resistant check Sumai 3. Has semi-erect seedlings with moderate tillering ability and winter hardiness. Under field conditions in Nanjing, China, its plant height was around 85-90 cm, with resilient stems and stronger tolerance to lodging. Spike length, spikelets and kernels per spike are 10-11 cm, 21-22 and 36-40, respectively. Grains are red, oval and semi-soft. Volume weight and 1000-kernel weight are 760 g/l and 36-40 g, respectively. Duration of growth periods is 213 d, harvested in the early June in Nanjing. Average grain yield in replicated yield trials ranged 3975-6510 kg/ha, 6.5-9.8% higher than the check Yangmai 158. Exhibited moderate resistance to powdery mildew and rusts.

PI 641168. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. CJ 9815; Changjiang 9815; Nannongda 9815. GP-811. Pedigree - Originally derived from a C2 population of scab-resistant gene pool generated by intermating among hybrids and progenies of 75 crosses with five agronomic parents (Yangmai 4, Ningmai 3, Zhemai 1, Qianjiang 1 and Wanjian 7909) crossed to each of 15 scab-resistant and/or complementary parents (Sumai 3, Ning 7840, Wangshuibai,

Whengzhouhongheshang, Fanshanxiaomai, Emai 9, Zhen 7495, Jinzhou 1, Xiangmai 1, Nobeokabouzu-Komogi, Shinchunaga, Qianhuan 803, 089xAvrora, Frontana and Veery), with the aidof a dominant male-sterile gene Ta1 (ms2), and bulking the seeds from the male-sterile plants, followed by recurrent selection. Awned, semi-dwarf and red-grained spring type with spindle-shaped spikes and white glumes. Has excellent resistance to Fusarium head blight (FHB or scab) caused by Fusarium graminearum. Scores for number of scabby spikelets under single-floret inoculation were close to or slightly higher than the resistant check Sumai 3. Has semi-erect seedlings with moderate tillering ability and winter hardiness. Under field conditions in Nanjing, China, plant height is around 85-90 cm, with resilient stems and strong tolerance to lodging. Spike length, spikelets and kernels per spike are 9-10 cm, 20-21 and 34-38, respectively. Grains are red, oval, plump and semi-soft. Volume weight and 1000-kernel weight are 770-780 g/l and 38-42 g, respectively. Duration of growth periods is 208-210 d, harvested in the late May and early June in Nanjing. Ripening performance is excellent. Average grain yield in replicated yield trials ranged 4814-5026 kg/ha, 9.5-14.5% over the check Yangmai 158. In field trials it yielded 5200-6100 kg/ha. Exhibited moderate resistance to powdery mildew and rusts.

The following were developed by Syngenta Seeds, Inc. - Vegetable, Boise, Idaho, United States. Received 11/03/2005.

PI 641169 PVPO. Cucurbita pepo L.
"90-3582". PVP 200600023.

The following were donated by G. J. Galletta, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States. Received 03/29/1994.

PI 641170. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Koro 103"; CFRA 1268. Developed in Japan. Pedigree - Marshall x Fairfax. This middle latitude station (Okitsu Branch Horticultural Research Station) produces processing, disease-resistant varieties. - George M. Darrow. 1966. The Strawberry. p. 305.

PI 641171. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Akashi 005"; CFRA 1269. Developed in Japan. Pedigree - selection of F. x ananassa. Information from Tatsuya Mochizuki.

PI 641172. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Benisuzume 025"; CFRA 1270. Developed in Japan. Pedigree - selection of F. x ananassa. Translation from Japanese = 'Scarlet Sparrow'. Named for its early red fruit. Information from Tatsuya Mochizuki.

PI 641173. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Okitsu 15"; CFRA 1271. Developed in Japan. Pedigree - Selection of F. x ananassa.

PI 641174. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Benihime 022"; CFRA 1272. Developed in Japan. Pedigree - selection of F. x ananassa. Information from Tatsuya Mochizuki.

The following were donated by Isamu Igarashi, Morioka Branch of National Research, Inst of Veg, Ornam, Tea, 92 Nabeyashiki Simokuriyagawa, Morioka, Iwate, Japan. Received 05/26/1994.

PI 641175. Fragaria x ananassa Duchesne ex Rozier
Cultivar. CFRA 1274. Developed in Japan. Pedigree - Reiko x unknown American selection. Information from Tatsuya Mochizuki.

PI 641176. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Hayazaki"; CFRA 1277. Developed in Japan. Pedigree - selection of F. x ananassa.

PI 641177. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Kagayaki"; CFRA 1279. Developed in Japan. Pedigree - selection of F. x ananassa.

PI 641178. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Kunowase"; Kunouwase; CFRA 1280. Developed in Japan. Pedigree - selection of F. x ananassa.

PI 641179. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Kikyou 5"; CFRA 1281. Developed in Japan. Pedigree - selection of F. x ananassa.

PI 641180. Fragaria x ananassa Duchesne ex Rozier
Cultivar. CFRA 1282. Developed in Japan. Pedigree - selection of F. x ananassa.

PI 641181. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Mishino"; CFRA 1283. Developed in Japan. Pedigree - selection of F. x ananassa.

PI 641182. Fragaria x ananassa Duchesne ex Rozier
Cultivar. Morioka 18; CFRA 1285. Developed in Japan. Pedigree - selection of F. x ananassa.

PI 641183. Fragaria x ananassa Duchesne ex Rozier
Cultivar. Morioka 22; CFRA 1286. Developed in Japan. Pedigree - selection of F. x ananassa.

PI 641184. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Nagoya-oomi"; CFRA 1289. Developed in Japan. Pedigree - selection of F. x ananassa.

PI 641185. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Ooishi-shikinari 2"; CFRA 1291. Developed in Japan. Pedigree - Old (1800's) everbearing selection of F. x ananassa.

PI 641186. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Sizutakara"; CFRA 1293. Developed in Japan. Pedigree - selection of F. x ananassa.

PI 641187. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Sokusei 3"; CFRA 1294. Developed in Japan. Pedigree - selection of F. x ananassa.

PI 641188. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Touhoku 1"; CFRA 1297. Developed in Japan. Pedigree - selection of F. x ananassa.

PI 641189. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Touhoku 5"; CFRA 1298. Developed in Japan. Pedigree - selection of F. x ananassa.

PI 641190. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Touhoku 13"; CFRA 1300. Developed in Japan. Pedigree - selection of F. x ananassa.

PI 641191. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Touhoku 14"; CFRA 1301. Developed in Japan. Pedigree - selection of F. x ananassa.

PI 641192. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Touhoku 15"; CFRA 1302. Developed in Japan. Pedigree - selection of F. x ananassa.

PI 641193. Fragaria x ananassa Duchesne ex Rozier
Cultivar. "Yagumo"; CFRA 1308. Developed in Japan. Pedigree - selection of F. x ananassa.

The following were donated by Harry Jan Swartz, University of Maryland, Dept. Horticulture, Holzaphel Hall, College Park, Maryland 20742, United States. Received 12/14/1998.

PI 641194. Fragaria pentaphylla Losinsk.
Cultivated. F. pentafolium #1; CFRA 1684. Pedigree - selection of F. pentaphylla.

PI 641195. Fragaria daltoniana J. Gay
Cultivated. F. daltoniana #1; CFRA 1685.

The following were developed by Rosa Hemphill, Oregon State University, North Willamette Experiment Station, Aurora, Oregon, United States; Margaret M. Stahler, USDA/NRSC, 2316 S. 6th St., Suite C, Klamath Falls, Oregon 97601, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 06/09/2003.

PI 641196. Fragaria x ananassa Duchesne ex Rozier
Breeding. NW 90054-37; CFRA 1822. Pedigree - WA 87010-7P(WSU 1985 x Pugent Reliance) x ORUS 984-49(OSC 46 82[OSC 3624 x Totem] x OSC 4445[Benton x OSC 2981]). NW 90054-37 is very high yielding (much greater than Totem), 'black' fruited genotype. Vigorous, dense, virus tolerant plant. Susceptible to foliar desease, particularly leaf spot (Mycosphaerla). Medium (equal to Totem) sized fruit. Good flavor, medium firmness, tender skin (could be used as processed product for fresh market). -Chad Finn, 2003.

The following were donated by Leonid A. Burmistrov, N.I. Vavilov Research Institute of Plant Industry, Department of Introduction, 44 Bolshaya Morskaya

Street, St. Petersburg, Leningrad 190000, Russian Federation. Received 01/27/1992.

PI 641197. Mentha kopetdaghensis Boriss.
Wild. Kara Kala (?); CMEN 646. Collected in Turkmenistan. Latitude 56° 18' N. Longitude 38° 29' E. Elevation 1000 m. Kopetdag Mountains, near the border with Iran. Pedigree - Collected from the wild in Turkmenistan. This in one of a set of five collections which differ only by their elevation.

PI 641198. Mentha kopetdaghensis Boriss.
Wild. Kara Kala (?); CMEN 647. Collected in Turkmenistan. Latitude 56° 18' N. Longitude 38° 29' E. Elevation 1050 m. Kopetdag Mountains, near the border with Iran. Pedigree - Collected from the wild in Turkmenistan. This in one of a set of five collections which differ only by their elevation.

PI 641199. Mentha kopetdaghensis Boriss.
Wild. Kara Kala (?); CMEN 648. Collected in Turkmenistan. Latitude 56° 18' N. Longitude 38° 29' E. Elevation 1100 m. Kopetdag Mountains, near the border with Iran. Pedigree - Collected from the wild in Turkmenistan. This in one of a set of five collections which differ only by their elevation.

The following were collected by Ray M. Harley, Kew Royal Botanic Gardens, Herbarium, Richmond, Surrey, England TW9 3AB, United Kingdom. Donated by Royal Botanic Gardens, Kew, Surrey, England TW9 3AB, United Kingdom. Received 03/02/1998.

PI 641200. Mentha suaveolens subsp. timija (Briq.) Harley
Wild. M. suaveolens "Timija"; 915; 1969-1659; CMEN 695. Collected 1964 in Morocco. Elevation 2286 m. Beni Mallal province, High Altas Mountains, Oued Bougmez. Margin of cultivated land. Pedigree - Collected from the wild in Morocco.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 08/24/1992.

PI 641201. Lens culinaris Medik. **subsp. culinaris**
Cultivated. B92-129; No. 37; W6 10813. Collected 07/02/1992 in Hungary. Izegi Cicnugh.

The following were donated by Weidong Chen, USDA, ARS, Washington State University, 303 Johnson Hall, Pullman, Washington 99164, United States. Received 07/14/2003.

PI 641202. Lens culinaris Medik. **subsp. culinaris**
Cultivated. ILL 9918; W6 24351. Resistant to white mold.

The following were collected by Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Maia Akhalkatsi, Institute of Botany, Georgian Academy of Sciences, Kojori road 1, Tbilisi, Georgia; Walter J. Kaiser, 3394 Chickory Way, Boise, Idaho 83706, United States. Donated by Botanical Institute of Tbilisi, Academy of Science of Georgia R.S.S., Tbilisi, Georgia. Received 08/06/2004.

PI 641203. Lens culinaris Medik. **subsp. culinaris**
Cultivated. G2510; W6 26163. Collected 07/08/2004 in Georgia. Originated from Svaneti province, Mestia district, town of Mestia.

PI 641204. Lens culinaris Medik. **subsp. culinaris**
Cultivated. G2512; W6 26165. Collected 07/08/2004 in Georgia. Both red and yellow cotyledons, seedcoats not mottled. Local lentil line increased at Mtskheta breeding station.

The following were collected by Sergey Shuvalov, N.I. Vavilov Research Institute of Plant Industry, Foreign Relationa, 42-44, Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Sergei Bulyntsev, N.I. Vavilov Institute for Plant Industry, 44 Bolshaya Morskaja Street, Department of Leguminous Crops, St. Petersburg, Leningrad 190000, Russian Federation; Ken Street, ICARDA, Aleppo, Syria; Zebuniso Muminshoeva, Tajik Agricultural Academy, Tajikistan; Ivan Maltsev, Botanical Institute, Uzbekistan. Received 11/15/2004.

PI 641205. Lens culinaris Medik. **subsp. culinaris**
Cultivated. TJK04:20-113; IG 139538; W6 26232. Collected 07/18/2004 in Tajikistan. Latitude 37° 58' 48" N. Longitude 69° 34' 37" E. Elevation 611 m.

PI 641206. Lens culinaris Medik. **subsp. culinaris**
Cultivated. TJK04:33-182; IG 139592; W6 26248. Collected 07/19/2004 in Tajikistan. Latitude 38° 0' 36" N. Longitude 70° 12' 54" E. Elevation 1074 m.

PI 641207. Lens culinaris Medik. **subsp. culinaris**
Cultivated. TJK04:34-199; IG 139608; W6 26253. Collected 07/20/2004 in Tajikistan. Latitude 37° 54' 0" N. Longitude 70° 1' 44" E. Elevation 1962 m.

PI 641208. Lens culinaris Medik. **subsp. culinaris**
Cultivated. TJK04:39-227; IG 139630; W6 26264. Collected 07/21/2004 in Tajikistan. Latitude 38° 3' 36" N. Longitude 70° 0' 36" E. Elevation 1274 m.

PI 641209. Lens culinaris Medik. **subsp. culinaris**
Cultivated. TJK04:43-271; IG 139670; W6 26279. Collected 07/22/2004 in Tajikistan. Latitude 37° 54' 36" N. Longitude 69° 46' 30" E. Elevation 586 m.

PI 641210. Lens culinaris Medik. **subsp. culinaris**
Cultivated. TJK04:46-283; IG 139427; W6 26285. Collected 07/22/2004 in Tajikistan. Latitude 38° 21' 0" N. Longitude 69° 58' 37" E. Elevation 1268 m.

PI 641211. Lens culinaris Medik. **subsp. culinaris**
Cultivated. TJK04:47-295; IG 139691; W6 26288. Collected 07/22/2004 in Tajikistan. Latitude 39° 22' 12" N. Longitude 70° 0' 36" E. Elevation 1515 m.

PI 641212. Lens culinaris Medik. **subsp. culinaris**
Cultivated. TJK04:50-340; IG 139733; W6 26298. Collected 07/23/2004 in Tajikistan. Latitude 38° 15' 36" N. Longitude 69° 49' 52" E. Elevation 1562 m.

PI 641213. Lens culinaris Medik. **subsp. culinaris**
Cultivated. TJK04:51-344; IG 139736; W6 26300. Collected 07/23/2004 in Tajikistan. Latitude 38° 21' 0" N. Longitude 69° 34' 34" E. Elevation 1542 m.

PI 641214. Lens culinaris Medik. **subsp. culinaris**
Cultivated. TJK04:58-382; IG 139767; W6 26312. Collected 07/25/2004 in Tajikistan. Latitude 38° 33' 36" N. Longitude 69° 0' 32" E. Elevation 503 m.

PI 641215. Lens culinaris Medik. **subsp. culinaris**
Cultivated. TJK04:60-400; IG 139783; W6 26316. Collected 07/25/2004 in Tajikistan. Latitude 38° 40' 12" N. Longitude 69° 19' 44" E. Elevation 1585 m.

PI 641216. Lens culinaris Medik. **subsp. culinaris**
Cultivated. TJK04:61-408; IG 139443; W6 26319. Collected 07/26/2004 in Tajikistan. Latitude 38° 37' 12" N. Longitude 68° 46' 55" E. Elevation 910 m.

PI 641217. Lens culinaris Medik. **subsp. culinaris**
Cultivated. TJK04:61-411; IG 139793; W6 26321. Collected 07/26/2004 in Tajikistan. Latitude 38° 37' 12" N. Longitude 68° 46' 55" E. Elevation 910 m.

PI 641218. Lens culinaris Medik. **subsp. culinaris**
Cultivated. TJK04:64-418; IG 139797; W6 26327. Collected 07/26/2004 in Tajikistan. Latitude 39° 2' 24" N. Longitude 68° 49' 26" E. Elevation 2100 m.

PI 641219. Lens culinaris Medik. **subsp. culinaris**
Cultivated. TJK04:64-422; IG 139801; W6 26329. Collected 07/26/2004 in Tajikistan. Latitude 39° 2' 24" N. Longitude 68° 49' 26" E. Elevation 2100 m.

The following were developed by William J. Laskar, Pioneer Hi-Bred International, 3850 N. 100 E, Windfall, Indiana 46076-9389, United States; Duane E. Falk, University of Guelph, Crop Science Division, Plant Agriculture Department, Guelph, Ontario N1G 2W1, Canada; G. Fedak, Agriculture and Agri-Food Canada, Plant Research Centre, Central Experimental Farm, Ottawa, Ontario K1A 0C6, Canada; Liljana Tamburic-Ilincic, Ridgetown College, Agronomy Building, Ridgetown, Ontario N0P 2C0, Canada; Art Schaafsmsa, University of Guelph, Ridgetown College, Main Street E., Ridgetown, Ontario N0P 2C0, Canada; D. Somers, Agriculture and Agri-Food Canada, Winnipeg, Manitoba, Canada. Received 11/21/2005.

PI 641220. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. RCATL33. GP-802. Pedigree - Ruby/Frontana #1//AC Ron/3/25R18/AC Ron. Tall (about 120 cm), early heading red wheat with awns. Has combined Fusarium head blight (FHB) resistance derived from Sumai 3 and Frontana and reduced deoxynivalenol (DON) accumulation, so is useful for FHB resistance breeding. Is lacking a high yield ptential, so cannot be registered as a cultivar in Ontario.

The following were developed by Greg D. Kushnak, Montana State University, Western Triangle Agric. Research Center, P.O. Box 1474, Conrad, Montana 59425, United States; Phil L. Bruckner, Montana State University, Dept. of Plant Sciences & Plant Pathology, 407 Leon Johnson Hall, Bozeman, Montana 59717, United States; N.R. Riveland, Williston Research Extension Center, North Dakota Agric. Exp. Sta., 14120 Highway 2, Williston, North Dakota 58801, United States; G.R. Carlson, Montana State University, Northern Agric. Research Center, Star Rt. 36, Havre, Montana 59501, United States; Joyce L. Eckhoff, Montana State University, Eastern Agric. Research Center, 1501 N. Central Avenue, Sidney, Montana 59270, United States; D.W. Wichman, Montana State University, Central Agric. Research Center, Moccasin, Montana 59462, United States; Robert N. Stougaard, Montana State University, Northwestern Agric. Research Center, 4570 MT Hwy 35, Kalispell, Montana 59901, United States; J.E. Berg, Montana State University, Dept. of Plant, Soil & Environmental Sciences, Bozeman, Montana 59717, United States; Ken Kephart, Montana State University, MSU Southern Ag. Research Center, 748 Railroad Highway, Huntley, Montana 59037, United States; D. Nash, Montana State University, Montana, United States; C.R. Cook, Westbred, LLC, 8111 Timberline Dr., Bozeman, Montana 59718, United States. Received 11/23/2005.

PI 641221. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "MT1159CL"; MTCL01159. PVP 200500347; CV-992; REST 641221. Pedigree - FS2/'Tiber'. Released 2004. Hard red winter CLEARFIELD @ wheat with resistance to imazamox (Beyond@) herbicide. Medium-early maturing, semidwarf hard red winter wheat. Average heading date (162.4 d from 1 Jan., n=19) is similar to Rampart (PI 593889), but 1.9 and 1.5 d earlier)P<0.05) than Neeley (CI 17860) and Tiber respectively. Plant height is medium (81 cm, n=39), shorter (P<0.05) than Rampart (87 cm), Neeley (87 cm), and Tiber (95cm). Winter survival was low to moderate in seven trials exhibiting differential sl, similar to Rampart (43%), but lower (P<0.05) than Neeley (51%) and Tiber (53%). On the basis of limited field evaluations under natural infection in Montana, MT1159CL is susceptible to stem rust (caused by Puccinia graminis), susceptible to leaust (caused by Puccinia triticina) and moderately resistant to stripe rust (caused by Puccinia striiformis). Tolerance to Beyond herbicide is equivalent to the herbicide tolerance of 'Above' winter wheat. Awned, tan-glumed. Its field appearance is m ost similar to Tiber, although much shorter. Juvenile plant growth is semi-erect. Plant color at boot stage is yellow-green compared to Neeley and Tiber which are darker green. After heading, the canopy is open and upright. Flag leaf is erect and twisted at the boot stage. Spike is tapering in shape, moderately short, and middense. Kernels are red colored, hard textured, and ovate in shape. Phentoypically uniform with exception that it contains a white-chaffed, imidazolinone tolerant variant at the frequency of 1 per 10,000 plants. Milling and baking characteristics are intermediate to Tiber and the imazamox tolerant cultivar, Above.

The following were developed by John M. Clarke, Agriculture and Agri-Food Canada, Semiarid Prairie Agricultural Res. Centre, Airport Road, Box 1030, Swift Current, Saskatchewan S9H 3X2, Canada; Ron M. DePauw, Agriculture and Agri-Food Canada, Semiarid Prairie Agricultural Res. Centre, Box 1030, Swift Current, Saskatchewan S9H 3X2, Canada; T. N. McCaig, Agriculture Canada, Swift Current Research Station, Swift Current, Saskatchewan S9H 3X2, Canada; R.E. Knox, Agriculture Canada, Research Station, Box 1030, Swift Current, Saskatchewan S9H 3X2, Canada; M.R. Fernandez, Agriculture Canada, Research Station, Swift Current, Saskatchewan, Canada; N. Ames, Agriculture and Agri-Food Canada, Research Branch, Cereal Research Centre, Winnipeg, Manitoba R3T 2M9, Canada; B.A. Marchylo, Grain Research Laboratory, Canadian Grain Commission, 1404-303 Main St., Winnipeg, Manitoba R3C 3G8, Canada; F.R. Clarke, Agriculture & Agri-Food Canada, P.O. Box 1030, Swift Current, Saskatchewan S9H 3X2, Canada; J.E. Dexter, Grain Research Laboratory, Canadian Grain Commission, 1404-303 Main Street, Winnipeg, Manitoba R3C 3G8, Canada. Received 11/25/2005.

PI 641222. Triticum turgidum subsp. durum (Desf.) Husn.
Cultivar. Pureline. "COMMANDER". CV-1001; REST 641222. Pedigree - W9260-BK03/AC Navigator//AC Pathfinder. Released 2004. Adapted to the durum production area of the Canadian prairies. Combines high yield, high grain pigment concentration, and very strong gluten properties. Is a semidwarf with strong straw; has similar maturity and disease resistance to other registered Canadian durum cultivars. Resistant to prevalent races of leaf rust (Puccinia recondita), stem rust (Puccinia graminis), and common bunt [Tilletia laevis and T. tritici], and susceptible to loose smut [Ustilago tritici] races prevalent in western Canada.

The following were developed by John M. Clarke, Agriculture and Agri-Food Canada, Semiarid Prairie Agricultural Res. Centre, Airport Road, Box 1030, Swift Current, Saskatchewan S9H 3X2, Canada; Ron M. DePauw, Agriculture and Agri-Food Canada, Semiarid Prairie Agricultural Res. Centre, Box 1030, Swift Current, Saskatchewan S9H 3X2, Canada; T. N. McCaig, Agriculture Canada, Swift Current Research Station, Swift Current, Saskatchewan S9H 3X2, Canada; R.E. Knox, Agriculture Canada, Research Station, Box 1030, Swift Current, Saskatchewan S9H 3X2, Canada; M.R. Fernandez, Agriculture Canada, Research Station, Swift Current, Saskatchewan, Canada; N. Ames, Agriculture and Agri-Food Canada, Research Branch, Cereal Research Centre, Winnipeg, Manitoba R3T 2M9, Canada; F.R. Clarke, Agriculture & Agri-Food Canada, P.O. Box 1030, Swift Current, Saskatchewan S9H 3X2, Canada. Received 11/25/2005.

PI 641223. Triticum turgidum subsp. durum (Desf.) Husn.
Cultivar. Pureline. "STRONGFIELD". CV-1000; PVP 200800079. Pedigree - AC Avonlea/DT665. Released 2004. Adapted to the durum production area of the southern Canadian prairies. Combines high yield, high grain protein concentration, and low grain cadmium concentration. Resistant to prevalent races of leaf rust (Puccinia recondita) and stem rust (Puccinia graminis), moderately resistant to common bunt [Tilletia laevis and T. tritici], and highly susceptible to loose smut [Ustilago tritici] races prevalent in western Canada. Has good end use quality, including high yellow pigment content and moderately strong gluten properties.

The following were developed by James L. Brewbaker, University of Hawaii, Dept. of Horticulture, 3190 Maile Way, Honolulu, Hawaii 96822, United States; A.D. Josue, University of Hawaii, Honolulu, Hawaii 96822, United States. Received 10/31/2005.

PI 641224. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi42. PL-327. Pedigree - Suwan1C7 S4 #6 S2 #2. Tropically-adapted inbred of high value in hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic Virus (MMV).

PI 641225. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi43. PL-328. Pedigree - Suwan1C S4 #6 S3 #3 S1 #1. Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic Virus (MMV).

The following were donated by James L. Brewbaker, University of Hawaii, Dept. of Horticulture, 3190 Maile Way, Honolulu, Hawaii 96822, United States; A.D. Josue, University of Hawaii, Honolulu, Hawaii 96822, United States. Received 10/31/2005.

PI 641226. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi44. PL-329. Pedigree - Hi31*Ki14) S6 #5. Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic Virus (MMV).

The following were developed by James L. Brewbaker, University of Hawaii, Dept. of Horticulture, 3190 Maile Way, Honolulu, Hawaii 96822, United States; A.D. Josue, University of Hawaii, Honolulu, Hawaii 96822, United States. Received 10/31/2005.

PI 641227. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi45. PL-330. Pedigree - Hi31*Ki14) S6 #5. Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic Virus (MMV).

PI 641228. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi46. PL-331. Pedigree - B37*(B73*Mp68:616) BC5 S2 #5. Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic Virus (MMV).

PI 641229. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi47. PL-332. Pedigree - B73*B37MR) BC3*Mp68) BC5) *B73) BC7 #2. Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic virus (MMV).

PI 641230. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi48. PL-333. Pedigree - CM116S6*Hi31) BC5) S2 #4. Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic virus (MMV).

PI 641231. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi49. PL-334. Pedigree - CM201*B68) BC6) *Hi31) BC5 S2 #4. Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic virus (MMV).

PI 641232. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi50. PL-335. Pedigree - Fla2AT113S3#4*Hi31) BC4 S3 #2. Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic virus (MMV).

PI 641233. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi51. PL-336. Pedigree - Fla2BT73S3#2*Hi31) BC3 S3 #2. Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic Virus (MMV).

PI 641234. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi52. PL-337. Pedigree - Fla2BT106#1S1#2*Hi31) BC5 S2 #3. Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic Virus (MMV).

PI 641235. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi53. PL-338. Pedigree - ICAL210 S2 #1 S1 #1 S3 #3. Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic Virus (MMV).

PI 641236. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi54. PL-339. Pedigree - ICAL221br2*Hi31) BC2 S2 #8. Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic Virus (MMV).

PI 641237. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi55. PL-340. Pedigree - ICAL224br2*G103) BC3 S6 #3 ** (** G103 = RIL from Hi31*HI58). Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic Virus (MMV).

PI 641238. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi56. PL-341. Pedigree - H632F*G103) BC4 S2 #2 S1 #2 ** (** G103 = RIL from Hi31*Hi58). Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic virus (MMV).

PI 641239. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi57. PL-342. Pedigree - Ku1409*Hi31) BC6 S2 #2. Tropically adapted inbred of high value in hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic Virus (MMV).

PI 641240. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi58. PL-343. Pedigree - Ku1414*Hi31) BC4 S3 #1. Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize mosaic virus (MMV).

PI 641241. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi59. PL-344. Pedigree - KP254#3*G103) BC4 #1 S5 #2 ** (** G1036 = RIL from Hi31*Hi58). Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic virus (MMV).

PI 641242. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi60. PL-345. Pedigree - Mo17*G103) BC4 S5 #3 ** (** G103 = RIL from Hi31*Hi58). Tropically adapted inbred of high value in

hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic virus (MMV).

PI 641243. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi61. PL-346. Pedigree - N3*Hi31) BC5 #2 S6 #1. Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to maize Mosaic virus (MMV).

PI 641244. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi62. PL-347. Pedigree - Pi17 #3 S2 #2 **** (**** Original line segrated Mv gene). Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic virus (MMV).

PI 641245. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi63. PL-348. Pedigree - Pi23 #2 S3 #2 S1 #2 **** (**** Original line segrated Mv gene). Tropically adapted inbred ov high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic Virus (MMV).

PI 641246. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi64. PL-349. Pedigree - Pi31 #8 **** (****Original line segrated Mv gene). Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic Virus (MMV).

PI 641247. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi65. PL-350. Pedigree - Tx601 #4 S2 #3 **** (**** Original line segregated Mv gene). Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to maize Mosaic Virus (MMV).

PI 641248. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi66. PL-351. Pedigree - TZi4#2S1 *G103) BC4 S4 #3 ** (** G103 = RIL from Hi31*Hi58). Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic Virus (MMV).

PI 641249. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi67. PL-352. Pedigree - TZi8#5 *G103) BC4 S2 #5 ** (** G103 = RIL from Hi31*Hi58). Tropically adapted inbred of high value in Hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic Virus (MMV).

PI 641250. Zea mays L. **subsp. mays**
Breeding. Inbred. Hi68. PL-353. Pedigree - TZi23 S3 #7 **** (**** Original line segregated Mv gene). Tropically adapted inbred of high value in hawaii, hybridized and converted to gene Mv (3:80) for resistance to Maize Mosaic Virus (MMV).

The following were developed by A. Menkir, International Institute of Tropical Agriculture, Oyo Road, PMB 5320, Ibadan, Oyo, Nigeria; Baffour Badu-Apraku, International Institute of Tropical Agriculture, c/o L.W. Lambourne & Co., Carolyn House, Cryodon, England CR9 3EE, United Kingdom. Donated by Baffour Badu-Apraku, International Institute of Tropical

Agriculture, c/o L.W. Lambourne & Co., Carolyn House, Cryodon, England CR9 3EE, United Kingdom. Received 11/14/2005.

PI 641251. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEEI 1. GP-473. Pedigree - TZEE-W SR BC5 x 1368 STR S7 INB 35. TZEEI 1 is extra-early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic witchweed, Striga hermonthica (Del.) Benth. The inbred line also has good levels of resistance to maize streak virus (MSV), tropical lowland rust (incited by Puccinia polysora Underw.) and blight [caused by Bipolaris maydis (Nisikado & Miyake) Shoemaker]. TZEEI-1 silks at 57 days and has plant height of 106 cm. It has a Striga emergence count of 31 plants per plot (0.75 m x 5 m) and Striga damage syndrome rating of 5 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 1906 kg/ha under Striga-free conditions and 1524 kg/ha under artificial infestation with 500,000 germinable seed of S. hermonthica. TZEEI 1 has flint grain texture.

PI 641252. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEEI 2. GP-474. Pedigree - TZEE-W SR BC5 X 1368 STR S7 INB 40. TZEEI 2 is extra-early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic witchweed, Striga hermonthica (Del.) Benth. The inbred line also has good levels of resistance to maize streak virus (MSV), tropical lowland rust (incited by Puccinia polysora Underw.) and blight [caused by Bipolaris maydis (Nisikado & Miyake) Shoemaker]. TZEEI 2 silks at 55 days and has plant height of 116 cm. It has a Striga emergence count of 34 plants per plot (0.75 m x 5 m) and Striga damage syndrome rating of 4 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 845 kg/ha under Striga-free conditions and 743 kg/ha under artificial infestation with 500,000 germinable seed of S. hermonthica. TZEEI- 2 has flint grain texture.

PI 641253. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEEI 3. GP-475. Pedigree - TZEE-W SR BC5 X 1368 STR S7 INB 76. TZEEI 3 is extra-early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic witchweed, Striga hermonthica (Del.) Benth. The inbred line also has good levels of resistance to maize streak virus (MSV), tropical lowland rust (incited by Puccinia polysora Underw.) and blight [caused by Bipolaris maydis (Nisikado & Miyake) Shoemaker]. TZEEI 3 silks at 54 days and has plant height of 84 cm. It has a Striga emergence count of 43 plants per plot (0.75 m x 5 m) and Striga damage syndrome rating of 5 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 562 kg/ha under Striga-free conditions and 433 kg/ha under artificial infestation with 500,000 germinable seed of S. hermonthica. TZEEI 3 has flint/dent grain texture.

PI 641254. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEEI 4. GP-476. Pedigree - TZEE-W SR BC5 X 1368 STR S7 INB 85. TZEEI 4 is extra-early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic witchweed, Striga hermonthica (Del.) Benth. The inbred line also has good levels of resistance to maize streak virus (MSV), tropical lowland

rust (incited by Puccinia polysora Underw.) and blight [caused by Bipolaris maydis (Nisikado & Miyake) Shoemaker]. TZEEI 4 silks at 52 days and has plant height of 114 cm. It has a Striga emergence count of 45 plants per plot (0.75 m x 5 m) and Striga damage syndrome rating of 5 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 627 kg/ha under Striga-free conditions and 535 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEEI 4 has flint grain texture.

PI 641255. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEEI 5. GP-477. Pedigree - TZEE-W SR BC5 X 1368 STR S7 INB 91. TZEEI 5 is extra-early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic witchweed, Striga hermonthica (Del.) Benth. The inbred line also has good levels of resistance to maize streak virus (MSV), tropical lowland rust (incited by Puccinia polysora Underw.) and blight [caused by Bipolaris maydis (Nisikado & Miyake) Shoemaker]. TZEEI 5 silks at 55 days and has plant height of 109 cm. It has a Striga emergence count of 26 plants per plot (0.75 m x 5 m) and Striga damage syndrome rating of 5 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 520 kg/ha under Striga-free conditions and 254 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEEI 5 has flint grain texture.

PI 641256. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEEI 6. GP-478. Pedigree - TZEE-W SR BC5 X 1368 STR S7 INB 100. TZEEI 6 is extra-early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic witchweed, Striga hermonthica (Del.) Benth. The inbred line also has good levels of resistance to maize streak virus (MSV), tropical lowland rust (incited by Puccinia polysora Underw.) and blight [caused by Bipolaris maydis (Nisikado & Miyake) Shoemaker]. TZEEI 6 silks at 58 days and has plant height of 110 cm. It has a Striga emergence count of 27 plants per plot (0.75 m x 5 m) and Striga damage syndrome rating of 5 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 650 kg/ha under Striga-free conditions and 413 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEEI 6 has flint grain texture.

PI 641257. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEEI 7. GP-479. Pedigree - TZEE-W SR BC5 X 1368 STR S6 INB 55A-1-2. TZEEI 7 is extra-early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic witchweed, Striga hermonthica (Del.) Benth. The inbred line also has good levels of resistance to maize streak virus (MSV), tropical lowland rust (incited by Puccinia polysora Underw.) and blight [caused by Bipolaris maydis (Nisikado & Miyake) Shoemaker]. TZEEI 7 silks at 57 days and has plant height of 112 cm. It has a Striga emergence count of 55 plants per plot (0.75 m x 5 m) and Striga damage syndrome rating of 4 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 647 kg/ha under Striga-free conditions and 568 kg/ha under artificial infestation with 500,000 germinable seed of S. hermonthica. TZEEI 7 has flint grain texture.

PI 641258. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEEI 8. GP-480. Pedigree - TZEE-W SR BC5 X 1368 STR S6 INB 55B-1-2. TZEEI 8 is extra-early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic witchweed, Striga hermonthica (Del.) Benth. The inbred line also has good levels of resistance to maize streak virus (MSV), tropical lowland rust (incited by Puccinia polysora Underw.) and blight [caused by Bipolaris maydis (Nisikado & Miyake) Shoemaker]. TZEEI 8 silks at 56 days and has plant height of 111 cm. It has a Striga emergence count of 56 plants per plot (0.75 m x 5 m) and Striga damage syndrome rating of 4 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 715 kg/ha under Striga-free conditions and 681 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEEI 8 has flint grain texture.

PI 641259. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEEI 9. GP-481. Pedigree - TZEF-Y SR BC1 X 9450 STR S6 INB 8A. TZEEI 9 is extra-early maturing, yellow endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic witchweed, Striga hermonthica (Del.) Benth. The inbred line also has good levels of resistance to maize streak virus (MSV), tropical lowland rust (incited by Puccinia polysora Underw.) and blight [caused by Bipolaris maydis (Nisikado & Miyake) Shoemaker]. TZEEI 9 silks at 60 days and has plant height of 96 cm. It has a Striga emergence count of 10 plants per plot (0.75 m x 5 m) and Striga damage syndrome rating of 4 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 2498 kg/ha under Striga-free conditions and 2486 kg/ha under artificial infestation with 500,000 germinable seed of S. hermonthica. TZEEI 9 has flint grain texture.

PI 641260. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEEI 11. GP-482. Pedigree - TZEE-W Pop X LDS6 (Set A) INB 21. TZEEI 11 is extra-early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic witchweed, Striga hermonthica (Del.) Benth. The inbred line also has good levels of resistance to maize streak virus (MSV), tropical lowland rust (incited by Puccinia polysora Underw.) and blight [caused by Bipolaris maydis (Nisikado & Miyake) Shoemaker]. TZEEI 11 silks at 62 days and has plant height of 116 cm. It has a Striga emergence count of 17 plants per plot (0.75 m x 5 m) and Striga damage syndrome rating of 4 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 3966 kg/ha under Striga-free conditions and 3070 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEEI 11 has flint/dent grain type.

PI 641261. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEEI 13. GP-483. Pedigree - TZEE-W Pop X LDS6 (Set A) INB 37. TZEEI 13 is extra-early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic witchweed, Striga hermonthica (Del.) Benth. The inbred line also has good levels of resistance to maize streak virus (MSV), tropical lowland rust (incited by Puccinia polysora Underw.) and blight [caused by Bipolaris maydis (Nisikado & Miyake) Shoemaker]. TZEEI 13 silks at 63

days and has plant height of 98 cm. It has a Striga emergence count of 6 plants per plot (0.75 m x 5 m) and Striga damage syndrome rating of 4 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 2682 kg/ha under Striga-free conditions and 1716 kg/ha under artificial infestation with 500,000 germinable seed of S. hermonthica. TZEEI 13 has flint grain texture.

PI 641262. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEEI 14. GP-484. Pedigree - TZEE-W Pop X LDS6 (Set A) INB 26. TZEEI 14 is extra-early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic witchweed, Striga hermonthica (Del.) Benth. The inbred line also has good levels of resistance to maize streak virus (MSV), tropical lowland rust (incited by Puccinia polysora Underw.) and blight [caused by Bipolaris maydis (Nisikado & Miyake) Shoemaker]. TZEEI 14 silks at 62 days and has plant height of 118 cm. It has a Striga emergence count of 29 plants per plot (0.75 m x 5 m) and Striga damage syndrome rating of 5 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 3528 kg/ha under Striga-free conditions and 2163 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEEI 14 has flint grain texture.

PI 641263. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEEI 16. GP-485. Pedigree - TZEE-W Pop X LDS6 (Set A) INB 27. TZEEI 16 is extra-early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic witchweed, Striga hermonthica (Del.) Benth. The inbred line also has good levels of resistance to maize streak virus (MSV), tropical lowland rust (incited by Puccinia polysora Underw.) and blight [caused by Bipolaris maydis (Nisikado & Miyake) Shoemaker]. TZEEI 16 silks at 60 days and has plant height of 111 cm. It has a Striga emergence count of 16 plants per plot (0.75 m x 5 m) and Striga damage syndrome rating of 4 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 2098 kg/ha under Striga-free conditions and 1933 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEEI 16 has flint grain texture.

PI 641264. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEEI 17. GP-486. Pedigree - TZEE-W Pop X LDS6 (Set A) INB 41. TZEEI 17 is extra-early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic witchweed, Striga hermonthica (Del.) Benth. The inbred line also has good levels of resistance to maize streak virus (MSV), tropical lowland rust (incited by Puccinia polysora Underw.) and blight [caused by Bipolaris maydis (Nisikado & Miyake) Shoemaker]. TZEEI-1 silks at 60 days and has plant height of 120 cm. It has a Striga emergence count of 5 plants per plot (0.75 m x 5 m) and Striga damage syndrome rating of 4 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 2349 kg/ha under Striga-free conditions and 1711 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEEI 17 has flint grain texture.

PI 641265. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEEI 20. GP-487. Pedigree - TZEE-W Pop X LDS6 (Set A) INB 44. TZEEI 20 is extra-early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic witchweed, Striga hermonthica (Del.) Benth. The inbred line also has good levels of resistance to maize streak virus (MSV), tropical lowland rust (incited by Puccinia polysora Underw.) and blight [caused by Bipolaris maydis (Nisikado & Miyake) Shoemaker]. TZEEI 20 silks at 60 days and has plant height of 123 cm. It has a Striga emergence count of 6 plants per plot (0.75 m x 5 m) and Striga damage syndrome rating of 4 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 3236 kg/ha under Striga-free conditions and 3112 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEEI 20 has flint grain texture.

PI 641266. Zea mays L. **subsp. mays**
Breeding. Inbred. TZEEI 21. GP-488. Pedigree - TZEE-W Pop STR C0 S6 INB 35 2-3. TZEEI 21 is extra-early maturing, white endosperm maize (Zea mays L.) inbred line with moderate levels of resistance to the parasitic witchweed, Striga hermonthica (Del.) Benth. The inbred line also has good levels of resistance to maize streak virus (MSV), tropical lowland rust (incited by Puccinia polysora Underw.) and blight [caused by Bipolaris maydis (Nisikado & Miyake) Shoemaker]. TZEEI 21 silks at 62 days and has plant height of 113 cm. It has a Striga emergence count of 3 plants per plot (0.75 m x 5 m) and Striga damage syndrome rating of 5 on a scale of 1-9 where 1=little or no damage and 9= severe damage due to S. hermonthica. It produced a grain yield of 2260 kg/ha under Striga-free conditions and 1506 kg/ha under artificial infestation with 5,000 germinable seed of S. hermonthica. TZEEI 21 has flint grain texture.

The following were donated by Stephen T. Kenny, Washington State University, IAREC, 24106 N. Bunn Road, Prosser, Washington 99350-8694, United States; Stephen T. Kenny, Washington State University, IAREC, 24106 N. Bunn Road, Prosser, Washington 99350-8694, United States; Alfred Haunold, USDA, ARS, Oregon State University, Department of Crop Sciences, Corvallis, Oregon 97333, United States. Received 1988.

PI 641267. Humulus lupulus L.
Cultivar. CHUM 807. Developed in Czech Republic.

The following were developed by Hops Research Institute, Zatec, North Bohemia, Czech Republic. Donated by Stephen T. Kenny, Washington State University, IAREC, 24106 N. Bunn Road, Prosser, Washington 99350-8694, United States; Stephen T. Kenny, Washington State University, IAREC, 24106 N. Bunn Road, Prosser, Washington 99350-8694, United States; Alfred Haunold, USDA, ARS, Oregon State University, Department of Crop Sciences, Corvallis, Oregon 97333, United States. Received 08/10/1988.

PI 641268. Humulus lupulus L.
Cultivar. CHUM 808.

PI 641269. Humulus lupulus L.
Cultivar. CHUM 809.

PI 641270. Humulus lupulus L.
Cultivar. CHUM 810.

The following were donated by Forest Farm Nursery, 990 Tetherow Road, Williams, Oregon 97544-9599, United States; Forest Farm Nursery, 990 Tetherow Road, Williams, Oregon 97544-9599, United States. Received 12/28/2004.

PI 641271. Ribes x gordonianum Lem.
Cultivated. CRIB 1417; R. x gordonianum. Pedigree - R. odoratum x R. sanguineum. Shrub to 1.5 meters; flowers in racemes, raspberry color outside, yellow inside. USDA zone 5. -- Forest Farm Catalog, 2006.

The following were donated by Forest Farm Nursery, 990 Tetherow Road, Williams, Oregon 97544-9599, United States. Received 12/28/2004.

PI 641272. Ribes laurifolium Jancz.
Cultivated. CRIB 1418; R. laurifolium. An excellent dwarf, early flowering shrub'(Hillier) for rock garden or border where its dark leathery leaves form a fine background for clusters of the palest creamy-green flowers very early in spring. PSh/Med - USDA zone 8 - NOT HARDY. From website www.forestfarm.com December 2004.

The following were developed by Melvin N. Westwood, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 01/22/1986.

PI 641273. Pyrus pyrifolia (Burm. f.) Nakai
Breeding. R3; P. pyrifolia; CPYR 1591. Pedigree - Seedling selection from seed collected in Iran. Original seedlot collected near the Caspian Sea.

The following were developed by A.S. Tuz, N.I. Vavilov Institute, Maikop Experiment Station, Maikop, Adygea, Russian Federation. Donated by Leonid A. Burmistrov, N.I. Vavilov Research Institute of Plant Industry, Department of Introduction, 44 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation. Received 02/02/1990.

PI 641274. Pyrus salicifolia Pall.
Breeding. CPYR 2350. Pedigree - Uncertain, selection from the wild?. Seed received through St. Petersburg from A.S. Tuz, Maikop Experiment Station, Adygea, Russia.

The following were collected by Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Edward J. Garvey, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 409, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States; Lufter Xhuveli, Agricultural University of Tirana, Dept. of Agronomy, Rr."Myslym Shyri", Tirana, Albania. Donated by Edward J. Garvey, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 409, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 10/01/1996.

PI 641275. Pyrus amygdaliformis Vill.
Wild. AL 045; Al 045; CPYR 2580. Collected 08/26/1996 in Albania. Latitude 40° 11' 54" N. Longitude 20° 10' 35" E. Elevation 1290 m. Pastures of Cajup. Steep east facing hillside surrounding the pastures of Cajup. Tree 5-6m tall. Bark thick corky, black-grey on trunk. Leaves linear, 3.8-5cm long x 1.3cm wide, growing from spurs. Fruit round, diameter 1-2cm, green mottled brown, calyx persistent.

PI 641276. Pyrus communis L.
Cultivated. Al 084; Dardhe-e-kuge; CPYR 2582; Dardhe-e-kuge open pollinated. Collected 08/28/1996 in Albania. Latitude 40° 37' 11" N. Longitude 20° 46' 56" E. Elevation 320 m. Korce, market. Pear shaped, green with red blush, 2.5cm long x 2.5cm at widest point.

PI 641277. Pyrus sp.
Cultivated. AL 087; Al 087; CPYR 2583. Collected 08/28/1996 in Albania. Latitude 40° 37' 11" N. Longitude 20° 46' 56" E. Elevation 320 m. Korce, market. Round, 2cm diameter, green with brown russeting.

PI 641278. Pyrus sp.
Wild. AL 123; Al 123; CPYR 2585. Collected 09/01/1996 in Albania. Latitude 41° 51' 44" N. Longitude 19° 59' 7" E. Elevation 630 m. Along road between Rreshen and Puke. Soil rocky. Companion plants Rubus, Quercus, Juniperus, Rosa, Punica, Ficus, Prunus spinosa, Lathyrus. Upright, small, 4-5m tall, 2-3m wide. Trunk 15cm dbh. Bark grey, trunk fissured. Leaves lanceolate, 3.5cm long x 1 cm wide, grey-green. Fruit 1.25cm long x 2cm wide, flattened, green with brown russet.

The following were collected by Philip L. Forsline, USDA, ARS, Cornell University, Plant Genetic Resources Unit, Geneva, New York 14456-0462, United States. Received 11/14/1996.

PI 641279. Pyrus regelii Rehder
Wild. CPYR 2587. Collected 09/12/1996 in Kazakhstan. Latitude 42° 40' 8" N. Longitude 70° 16' 17" E. Elevation 810 m. Kazakhstan, Karataw, Boraldy River Forest area, about 35 km SE of Borald Forest camp which is 80 km N. of Chimkent. Site 8, Collection no. 4. Aspect variable; open environment; xerophytic site, < 300mm rain. Associated vegetation: Crataegus, Malus, Vitis, Morus, Rosa. Pedigree - collected from the wild in Kazakhstan. Should be very cold hardy, down to minus 40 deg celcius in mountains.

The following were donated by David N. Griffith, 1 Stillwater Drive, Dadeville, Alabama 36853, United States. Received 02/17/1998.

PI 641280. Pyrus sp.
Clone. "Ledbetter Pear"; CPYR 2597. The Ledbetter pear tree is almost immune to fireblight and leaf spot, is a strong-growing, globe-shaped tree, is self-pruning, blooms rather late, and is a fairly regular producer. The fruit is medium to large size, round, with an even russett skin.Lopsided fruit is uncommon. In my opinion the flavor is good but not outstanding. The texture is too coarse for most markets, having stone cells that are large but soft, so that they crunch when chewed (a bit like Grape-nuts). The fruit ripens in mid-August in mid-Alabama,

ready to be eaten fresh from the tree or to be cooked, canned, or made into Southern-style crunchy-chewy preserves. One of the Ledbetter sons had told me that 'Papa was sawmilling down at Crossroads, between 1900 and 1905 when he saw a thrifty little pear seedling where one of the workers had tossed a core the year before. He dug it up and brought it home in his lunch bucket and set it out in the edge of the garden, beside the road. When I went to see it, it was about forty feet high, about sixty feet spread and more than 2 1/2 feet across the single trunk, with only a few dead limbs. It had several bushels of fruit, though not a heavy crop for a tree that size. I also noticed a smaller tree up the hill, closer to the house-site with a good crop of similar fruit. Then in the 1980's a sickening event occurred. The property was bought by a timber company that harvested all marketable timber and bulidozed off everything else in preparation for setting pine trees! Im agine my frustration when I learned that the trees that I had been watching and prizing so highly were on the Virgil Reynolds place, and that the real Ledbetter tree was a half mile away on the Arthur Ledbetter place, still producing well in spite of losing nearly half of its limbs in a storm. Arthur's daughter, Willie Ruth, told me that she remembered that their tree had been dug up and brought there from under the big tree on the Reynolds place, now about 65 years old.

The following were donated by Myra Manoah, Ministry of Agriculture, The Volcani Center, The Israeli Gene Bank for Agricultural Crops, Bet Dagan, Central 50250, Israel. Received 07/22/2000.

PI 641281. Pyrus syriaca Boiss.
Wild. Pysy-7-1; 61-920; P. syriaca - Israel; CPYR 2716. Collected in Israel. Elevation 0 m. Zur Hadassa. Pedigree - Collected from the wild in Israel. Collected in the wild as seed in Zur Hadassa, Israel on 10 June,1998, as part of an emergency seed collection project in the face of rapid urban development, and stored at the Israeli Gene Bank for Agricultural Crops, Bet Dagen, Israel. Seed samples were requested for the National Plant Germplasm System in June, 2000 and were sent to the USDA Plant Exchange Office in July 2000 to be forwarded to appropriate repositories. We received 3 seeds. All seeds were planted in September, 2000 and providedwith 40 days of cold stratification. One seed germinated and is established as a tree at the Repository.

The following were donated by C.T. Kennedy, California Rare Fruit Growers, 1315 33rd Ave., San Francisco, California 94122, United States. Received 03/15/2001.

PI 641282. Pyrus communis L.
Cultivar. Comtesse de Paris; CPYR 2724. Developed in France. Pedigree - Unknown. Originated at Geest, Saint Renny, Belgium, sfrom seed sown by Van Mons. First reported in 1847. Fruit below medium in size and resembles Bartlett in form. Skin greenish-yellow with some green dots, reasonably smooth. Flesh yellowish in color, juicy, fairly fine. Sweet, aromatic, pleasing flavor. Early midseason. Tree moderately vigorous, with some susceptibility to blight. - H. Hartman, 1957.

The following were developed by C.F. Patterson. Donated by Margie Luffman, Agriculture & Agri-Food Canada, Canadian Clonal Genebank, GPCRC, Harrow, Ontario N0R 1G0, Canada. Received 03/25/2002.

PI 641283. Pyrus communis L.
Cultivar. "Philip"; CPYR 2738. Pedigree - Pyrus ussuriensis x Aspa. Philip (CPYR 2738).-Originated in Saskatoon, Saskatchewan, Canada, by C.F. Patterson, University of Saskatchewan. Introduced in 1960 for home gardens. Pyrus ussuriensis x Aspa; selected in 1958; tested as Sask. PR 4. Fruit: 2 3 / 4 inches long and 2 1 / 2 inches in diam. under nortirrigated field conditions at Saskatoon; skin tender; very fair quality; ripens during the last 2 weeks of September. Tree: hardy.

The following were collected by Paul Meyer, The University of Pennsylvania, Morris Arboretum, 9414 Meadowlark Avenue, Philadelphia, Pennsylvania 19118, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Gagik Movsisyan, Armenia; Alan Whittemore, U.S. National Arboretum, USDA, ARS, 3501 New York Avenue, NE, Washington, District of Columbia 20002-1958, United States; Ashot A. Charchoglian, National Academie of Sciences, Institute of Botany, Yerevan, Armenia; Pavel Humbaryan, Armenia Institute of Botany, Yerevan, Armenia; Yura Paityan, Armenia Institute of Botany, Yerevan, Armenia. Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/11/2002.

PI 641284. Pyrus salicifolia Pall.
Wild. ARM-02-029; CPYR 2793. Collected 09/01/2002 in Armenia. Latitude 39° 3' 10" N. Longitude 46° 29' 37" E. Elevation 1086 m. Shikahogh Reserve in the province of Syunik Marz. With Pyrus salicifolia, Quercus patraea along roadside. Pedigree - Collected from the wild in Armenia.

PI 641285. Pyrus communis subsp. caucasica (Fed.) Browicz
Wild. ARM-02-167; CPYR 2799. Collected 09/12/2002 in Armenia. Latitude 40° 46' 47" N. Longitude 44° 28' 44" E. Elevation 1526 m. Vanadzor Valley in Lori Marz province. Cut over, grazed hillside with Malus orientalis, Rosa spp. and Quercus macranthera. Pedigree - Collected from the wild in Armenia.

PI 641286. Pyrus communis subsp. caucasica (Fed.) Browicz
Wild. ARM-02-175; CPYR 2800. Collected 09/13/2002 in Armenia. Latitude 40° 55' 38" N. Longitude 44° 26' 13" E. Elevation 1642 m. Near Pushkin Mountain Road in Lori Marz province. Forest edge with Carpinus betulus, Fagus orientalis and Quercus macranthera. Pedigree - Collected from the wild in Armenia.

The following were donated by Ethan A. Natelson, 8707 Wateke Drive, Houston, Texas 77074, United States. Received 02/06/2003.

PI 641287. Pyrus hybrid
Breeding. CPYR 2807; Acres Home. A seedling found in a field at the Acres Home subdivision in Houston, Texas. It is a beautiful, large pear, with a red blush. Fairly good quality, precocious, total blight resistance, heavy bearer, spreading shape. -- E. Natelson, Houston, Texas, 2003.

PI 641288. Pyrus hybrid
Cultivar. "Louisiana Beauty"; CPYR 2808. Claimed to be identical to Leona. Natelson (correspondence 2003) disagrees. He indicates that Louisiana Beauty has lower chill requirement than Leona and is more pyriform. Widely grown in southern Louisiana.

PI 641289. Pyrus hybrid
Cultivar. "Bosarge"; CPYR 2809. This is a very large, pyriform and totally russetted Asian type. Sort of a Cajun Bosc. Widely grown in southern Louisiana and Mississippi. -- E. Natelson, Houston, Texas, 2003.

PI 641290. Pyrus hybrid
Cultivar. "Vermilion"; CPYR 2810. This came from an ancient tree on the old family estate of an Emile Thibodeaux, in Vermilion Parish in Louisiana. Grafts have produced an excellent pear, according to Tom Becnel, who is propagating the tree in the New Orleans area. -- Ethan Natelson, Houston, Texas, February 2003. Not the same as European cultivars with similar name. Ragan (1908) notes Vermillion (of Haut) is an old European cultivar, and Vermillion or Vermilion is also a synonym for several other old cultivars ussels (Belle de Bruxelles of Downing, 1846), French Jargonelle (Vermilion d'ete), Wurtemburg (Vermillion d'ete), etc.

The following were donated by Charlotte Shelton, Vintage Virginia Apples LLC, 2503 Rural Ridge Lane, P.O. Box 210, North Garden, Virginia 22959, United States; Tom Buford, Virginia, United States. Received 04/04/2003.

PI 641291. Pyrus communis L.
Cultivar. Burford Pear; CPYR 2811. Pedigree - Possibly an old French cultivar. Burford Pear was a selection from my great-grandfather's orchard that undoubtedly, he found outstanding because of it flavor, ripening quality, tree stamina and above all resistance to fireblight and pear psylla. It likely is also a genetic dwarf, but this is currently at test at Vintage Virginia Orchards in North Garden, VA, where it is grafted on both pear stocks and quince. A 75 to 100 year old tree was my childhood backyard favorite pear tree, growing between the row of outhouses and the gas generator house that piped 'light' to the main house. Its companion was a Slappy peach, a huge juicy bomb that I enjoyed hurling into the chicken pens to watch frenetic chicken pecking its delectable flesh. This about seventeen foot tree (I measured it a number of times before cutting the top out) has extraordinarily limber branches. With a full load of from 17 to 20 bushels the unfruited limbs nearly head high would bend to the ground with mature fruit without breakage. In 1954 hurricane Hazel blew the tree to a 45 degree angle, but it was righted by a sling around its trunk with the aid of our faithful Ford 8N tractor and produced it usual full crop of pears. For nearly 60 years I enjoyed the pears canned from this tree. The ripening time for harvest is forgiving and even when fully ripe on the tree or gathered from windfalls the pears are useable for dessert, canning and pickling. A family recipe for pear-pineapple jam is especially memorable with only fresh pineapples, a luxury, used. The most significant use of the Burford pear is fresh canned. They are peeled, cored and packed in quart jars with a light syrup poured over; then processed. The color remains white. In the winter they become a favorite dessert, plain or

stuffed with Aboria rice and fruits like canned figs or berries or just cheese with a few dashes of port wine. Hickory or walnuts are also good stuffings. -- Tom Burford, April 2003.

The following were collected by Paul Meyer, The University of Pennsylvania, Morris Arboretum, 9414 Meadowlark Avenue, Philadelphia, Pennsylvania 19118, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Marine Mosulishvili, Plant Systematics, Institute of Botany, Georgian Academy of Sciences, Kojori road 1, Tbilisi, Georgia; Giorgi Arabuli, State Museum of Georgia, Tbilisi, Georgia. Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/26/2004.

PI 641292. Pyrus communis subsp. caucasica (Fed.) Browicz Wild. GE-2004-037; CPYR 2835. Collected 09/25/2004 in Georgia. Latitude 42° 25' 51" N. Longitude 44° 56' 32" E. Elevation 1098 m. Tush-Pshav-Kevsureti (Mtskheta-Mtianeti) province, Aregri River (Psavis Aragvi) valley north of T'bilisi. Pedigree - Collected in the wild in Republic of Georgia.

PI 641293. Pyrus communis subsp. caucasica (Fed.) Browicz Wild. GE-2004-039; CPYR 2836. Collected 09/26/2004 in Georgia. Latitude 42° 39' 50" N. Longitude 45° 10' 12" E. Elevation 1415 m. Tush-Pshav-Kevsureti (Mtskheta-Mtianeti) province, Kevsureti district, northwest of Shatili near Mutso. Pedigree - Collected in the wild in Republic of Georgia.

PI 641294. Pyrus communis subsp. caucasica (Fed.) Browicz Wild. GE-2004-041; CPYR 2837. Collected 09/26/2004 in Georgia. Latitude 42° 39' 24" N. Longitude 45° 9' 17" E. Elevation 1450 m. Tush-Pshav-Kevsureti (Mtskheta-Mtianeti) province, Kevsureti district, Shatili. Pedigree - Collected in the wild in Republic of Georgia.

PI 641295. Pyrus communis subsp. caucasica (Fed.) Browicz Wild. GE-2004-051; CPYR 2838. Collected 09/26/2004 in Georgia. Latitude 42° 31' 6" N. Longitude 44° 55' 57" E. Elevation 1412 m. Tush-Pshav-Kevsureti (Mtskheta-Mtianeti) province, Aregri River (Psavis Aragvi) valley north of Barisakho. Pedigree - Collected in the wild in Republic of Georgia.

PI 641296. Pyrus communis subsp. caucasica (Fed.) Browicz Wild. GE-2004-068; CPYR 2839. Collected 09/30/2004 in Georgia. Latitude 41° 44' 14" N. Longitude 43° 30' 42" E. Elevation 1719 m. Kartli province, near Bakuriani. Forest edge, along pasture with Fagus orientalis. Pedigree - Collected in the wild in Republic of Georgia.

PI 641297. Pyrus communis subsp. caucasica (Fed.) Browicz Wild. GE-2004-075; CPYR 2840. Collected 10/01/2004 in Georgia. Latitude 41° 43' 54" N. Longitude 43° 18' 30" E. Elevation 1587 m. Kvemo Kartli (Samtskhe-Javakheti) province, near Satere. Pedigree - Collected in the wild in Republic of Georgia. Seed collected from two trees several kilometers apart in the Georgia province Samtskhe-Javakheti, near the village of Satere. Seeds are packaged as separate sub-samples. Package A is from a tree with larger fruit. Package B is from a larger tree having smaller fruit than Tree A. - October 2004 30 November 2006:

image made of seeds from package B. These seeds are noticeably smaller than seeds in package A. - jp.

PI 641298. Pyrus communis subsp. caucasica (Fed.) Browicz
Wild. GE-2004-081; CPYR 2841. Collected 10/02/2004 in Georgia. Latitude 41° 44' 58" N. Longitude 43° 31' 44" E. Elevation 1680 m. Kartli province, fruit collected beneath row of trees planted along road in front of school in Bakuriani. Pedigree - Collected in the wild in Republic of Georgia.

PI 641299. Pyrus communis subsp. caucasica (Fed.) Browicz
Wild. GE-2004-120; CPYR 2842. Collected 10/06/2004 in Georgia. Latitude 42° 27' 34" N. Longitude 43° 5' 19" E. Elevation 1216 m. Racha (Racha-Lechkhumi and Kvemo Svaneti) province, Nikortsminda. In church yard of 11th century church. Pedigree - Collected in the wild in Republic of Georgia.

PI 641300. Pyrus communis subsp. caucasica (Fed.) Browicz
Wild. GE-2004-131; CPYR 2844. Collected 10/07/2004 in Georgia. Latitude 41° 58' 57" N. Longitude 43° 13' 15" E. Elevation 832 m. Imereti province, near Vani, south of Kharagauli. Pedigree - Collected in the wild in Republic of Georgia.

PI 641301. Pyrus communis subsp. caucasica (Fed.) Browicz
Wild. GE-2004-136; CPYR 2845. Collected 10/07/2004 in Georgia. Latitude 41° 58' 31" N. Longitude 43° 13' 22" E. Elevation 680 m. Imereti province, Skhliti village, south of Kharagauli. Pedigree - Collected in the wild in Republic of Georgia.

The following were developed by D.L. Jennings, Scottish Crop Research Inst., Invergowrie, Scotland, United Kingdom. Donated by Marion Grassie, Scottish Crop Research Institute, Invergowrie, Dundee, Scotland DD25DA, United Kingdom. Received 03/18/2003.

PI 641302. Rubus hybrid
Cultivar. CRUB 2194. Pedigree - Silvan x unnamed seedling. An early ripening, genetically spineless trailing blackberry with excellent fruit quality. Origin in Kent, England, by D.L. Jennings, Medway Fruits. Silvan x unknown seedling; introduced in 1995. World-wide marketing rights held by NSA Plants, West Malling, Kent. Fruit: size between 6.0 and 6.5 g, similar to Silvan; firm, long, conic; attractive, bright, regular appearance; ripens early July in southern England, 1 week after Silvan and 1 week before Waldo; excellent flavor; better adapted to dis tant markets than Silvan. Plant: high yeild potential; first-year canes stout, spine-free, vigorous, and spreading; second-year canes short, stout, good fruit exposure.

The following were collected by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 03/30/2004.

PI 641303. Rubus rosifolius Sm.
Wild. R. rosifolius Hawaii; CRUB 2253. Collected 03/22/2004 in Hawaii, United States. Latitude 22° 12' 49" N. Longitude 159° 35' 23" W. Elevation 200 m. Near one mile marker, Napoli Coast Trail, northwest

coast of Kauai Island. About 0.8 mile NE of Hanakapiai Beasch. Distrubed soil along uphill edge of hiking trail, exposed to sun. Pedigree - Collected from the wild in Hawaii. Rubus rosifolius ia an alien species not native to the Hawaiian islands, however it has become widely established. Local common name is Thimbleberry. Fruit is orange-red, medium size, with many small drupelets; seedy and not particularly tasty. Flowers white.

The following were collected by Paul Meyer, The University of Pennsylvania, Morris Arboretum, 9414 Meadowlark Avenue, Philadelphia, Pennsylvania 19118, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Marine Mosulishvili, Plant Systematics, Institute of Botany, Georgian Academy of Sciences, Kojori road 1, Tbilisi, Georgia; Giorgi Arabuli, State Museum of Georgia, Tbilisi, Georgia. Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/26/2004.

PI 641304. Rubus saxatilis L.
Wild. GE-2004-062; CRUB 2303. Collected 09/29/2004 in Georgia. Pedigree - Collected from the wild in the Republic of Georgia.

PI 641305. Rubus caesius L.
Wild. GE-2004-103; CRUB 2304. Collected 10/04/2004 in Georgia. Pedigree - Collected from the wild in the Republic of Georgia.

The following were donated by Forest Farm Nursery, 990 Tetherow Road, Williams, Oregon 97544-9599, United States. Received 12/28/2004.

PI 641306. Rubus parviflorus Nutt.
Cultivar. "Double White Thimbleberry"; CRUB 2306. The lovely, 2' camellia-like flowerss of this special double flowered form of our native thimbleberry enhances yet again the handsome large, maple-like foliage of this thornless rounded 1-4'shrub. Sun-PSh/Med - USDA Zone 3. From website www.forestfarm.com in December 2004.

The following were developed by Doyle's Thornless Blackberry, Inc., 1600 Bedford Road, Washington, Indiana 47501, United States. Received 02/09/2005.

PI 641307. Rubus hybrid
Cultivar. CRUB 2307; Doyle. Pedigree - Selection of a chance seedling from among many possible parents in a garden.

The following were donated by Mark Shelly, 5 Culpepper Court, Jackson, New Jersey 08527, United States. Received 04/11/2005.

PI 641308. Rubus idaeus L.
Cultivar. CRUB 2309.

The following were donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 09/20/2005.

PI 641309. Rubus hybrid
Cultivar. "ORUS 1111-1"; CRUB 2311. Selection of blackberry Rubus sp. from USDA-ARS program in Oregon. Trailing blackberry. Very productive and early especially in south British Columbia, Canada. Thorny. Processing type. Large fruit, fairly soft fruit with fair flavor. Main positive attributes- high yield and earliness in cool maritime climate like British Columbia.

PI 641310. Rubus hybrid
Cultivar. "ORUS 1350-2"; CRUB 2312. Pedigree - Black Butte x ORUS-828-43. Selection of blackberry Rubus sp. from USDA-ARS program in Oregon. Trailing blackberry. Very productive. Thorny. Processing or Fresh Market. Very large 10-12 g cylindrical fruit with block end. Very high yielding. Would have been released as cultivar except for thorniness and not completely out of running.

PI 641311. Rubus ursinus Cham. & Schltdl.
Cultivar. "GP 4-14"; CRUB 2313. Pedigree - Rubus ursinus selection from open pollinated seed collected from Sutton Beach, Oregon. Identified as superior due to yield, fruit size and lower susceptiblility to foliar disease.

PI 641312. Rubus ursinus Cham. & Schltdl.
Cultivar. "LIG 2m-8"; CRUB 2314. Pedigree - Rubus ursinus selection from open pollinated seed collected from southwest Quicene, Olympic National Forest, Washington. Male selection in this dioecious species. Selected for vigor and being floriferous.

PI 641313. Rubus ursinus Cham. & Schltdl.
Cultivar. "LIG 5m-1"; CRUB 2315. Pedigree - Rubus ursinus selection from open pollinated seed collected from Dungeness, Washington. Male selection in this dioecious species. Selected fo r vigor and being floriferous.

PI 641314. Rubus ursinus Cham. & Schltdl.
Cultivar. "LIG 5m-11"; CRUB 2316. Pedigree - Rubus ursinus selection from open pollinated seed collected from Dungeness, Washington. Male selection in this dioecious species. Selected fo r vigor, disease resistance and being floriferous.

PI 641315. Rubus hybrid
Cultivar. "ORUS 1393-1"; CRUB 2317. Pedigree - Navaho(4x) x ORUS 1122-1(6x). Hybrid of eastern erect blackberry and western trailing blackberry. Pentaploid (5x) but fully fertile. Thorny but throws thornless progeny so probably Tt (heterozygous thornless) for Merton thornlessness. Excellent fruit firmness, appearance, flavor, shape, texture and ease of separation from plant. Intemediate in cane habit (i.e. weak erect habit.).

PI 641316. Rubus hybrid
Cultivar. "ORUS 1397-4"; CRUB 2318. Pedigree - Kotata(7x) x Navaho(4x). Hybrid of eastern erect blackberry and western trailing blackberry. Pentaploid (5x) but fully fertile. Thorny but throws thornless progeny so probably Tt (heterozygous thornless) for Merton thornlessness. Excellent fruit firmness, appearance, shape, texture and ease of

separation from plant. Good flavor. Crown forming, but, erect canes. Vigorous.

PI 641317. Rubus ursinus Cham. & Schltdl.
Cultivar. "GP 4-9"; CRUB 2319. Pedigree - Rubus ursinus selection from open pollinated seed collected from Sutton Beach, Oregon. Identified as superior due to yield, fruit size and lower susceptibility to foliar disease. Ploidy estamated to be 11x by flow cytometry (Meng and Finn, 2002).

The following were donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/26/2005.

PI 641318. Rubus ursinus Cham. & Schltdl.
Cultivar. "GP 6-8"; CRUB 2320. Identified as superior due to yield and fruit size. Ploidy estamated to be 12x by flow cytometry (Meng and Finn, 2002).

Unknown source. Received 08/31/2001.

PI 641319. Vaccinium oxycoccos L.
Wild. HVSC-045; CVAC 1461. Collected in Khabarovsk, Russian Federation. Latitude 46° 32' 4" N. Longitude 134° 25' 25" E. Elevation 70 m. Located in a poorly drained bog-humus swamp with a few streams flowing though with no over story. Cattails, grass sedges, and willows present. Pedigree - Collected from the wild in Khabarovsk, Russain Federation. Many individual plants collected as a population sample.

Unknown source. Received 08/31/2001.

PI 641320. Vaccinium oxycoccos L.
Wild. HVSC-049; CVAC 1465. Collected in Khabarovsk, Russian Federation. Latitude 46° 49' 55" N. Longitude 134° 31' 23" E. Elevation 0 m. Located in a flat 80% exposed bog containing Leather leaf sphagnum, Betula and a few scattered larches. Mosquitoes also present. Pedigree - Collected from the wild in Khabarovsk, Russain Federation. Many individual plants collected as a population sample.

Unknown source. Received 08/31/2001.

PI 641321. Vaccinium oxycoccos L.
Wild. HVSC-050; CVAC 1466. Collected in Khabarovsk, Russian Federation. Latitude 46° 49' 55" N. Longitude 134° 31' 23" E. Elevation 102 m. Found on open flat bog with poor exposure, this little leafed Cranberry is accompanied by sphagnum larix, scattered grasses, Leather Leaf, and Sundew. Pedigree - Collected from the wild in Khabarovsk, Russain Federation. Many individual plants collected as a population sample.

Unknown source. Received 08/31/2001.

PI 641322. Vaccinium oxycoccos L.
Wild. HVSC-057; CVAC 1469. Collected in Khabarovsk, Russian Federation. Latitude 48° 5' 33" N. Longitude 135° 8' 4" E. Elevation 84 m. Openly exposed, on a flat bog peat/sphagnum soil with poor, drainage, grass sphagnum, Equisetum, scattered Populous, Larch around edge (lady's thumb) Polyganum, Camiomile, Taraxicum, and dock present. Pedigree - Collected from the wild in Khabarovsk, Russain Federation. Many individual plants collected as a population sample.

Unknown source. Received 08/31/2001.

PI 641323. Vaccinium oxycoccos L.
Wild. HVSC-058; CVAC 1471. Collected in Khabarovsk, Russian Federation. Latitude 48° 5' 33" N. Longitude 135° 8' 7" E. Elevation 84 m. Open flat, poorly drained bog-sphagnum, grass sphagnum Equisetum, scattered Populous, Larch, Taraxauim, dock also present. Pedigree - Collected from the wild in Khabarovsk, Russain Federation. Many individual plants collected as a population sample.

Unknown source. Received 08/31/2001.

PI 641324. Vaccinium oxycoccos L.
Wild. HVSC-066; CVAC 1474. Collected in Khabarovsk, Russian Federation. Latitude 49° 0' 26" N. Longitude 136° 28' 18" E. Elevation 41 m. Gathered from a flat open poorly drained bog. Scattered Birch larch pink on edges of bog, Sphagnum, grasses, and Leather leaf present. Pedigree - Collected from the wild in Khabarovsk, Russain Federation. Many individual plants collected as a population sample.

Unknown source. Received 08/31/2001.

PI 641325. Vaccinium oxycoccos L.
Wild. HVSC-089A; CVAC 1477. Collected in Khabarovsk, Russian Federation. Latitude 49° 5' 36" N. Longitude 139° 21' 53" E. Elevation 730 m. 80% exposed flat poorly drained Sphagnum bog with tufts. Pedigree - Collected from the wild in Khabarovsk, Russain Federation. Many individual plants collected as a population sample.

Unknown source. Received 08/31/2001.

PI 641326. Vaccinium oxycoccos L.
Wild. HVSC-089B; CVAC 1478. Collected in Khabarovsk, Russian Federation. Latitude 49° 5' 36" N. Longitude 139° 21' 53" E. Elevation 730 m. 80% exposed flat poorly drained Sphagnum bog with tufts. Pedigree - Collected from the wild in Khabarovsk, Russain Federation. Many individual plants collected as a population sample.

Unknown source. Received 08/31/2001.

PI 641327. Vaccinium oxycoccos L.
Wild. HVSC-095; CVAC 1481. Collected in Khabarovsk, Russian Federation. Latitude 49° 10' 53" N. Longitude 140° 19' 57" E. Elevation 16 m. 80% flat poorly drained Sphagnum bog. Pedigree - Collected from the wild in Khabarovsk, Russain Federation. Many individual plants collected as a population sample.

The following were developed by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Donated by Susan D. Rooks, North Carolina State University, Department of Horticultural Science, Horticultural Crop Research Station, Castle Hayne, North Carolina 28429, United States. Received 02/25/2003.

PI 641328. Vaccinium corymbosum L.
Cultivar. "Pamlico"; CVAC 1517. Pedigree - (NC 2901){NC1406 (US 74 x Elizabeth) x Pender [Bluechip x B-1 (wild V. corymmbosum)]}. Ripening of Pamlico will follow 'Bladen' and 'Reveille' and will be before 'Pender,' helping fill the gap between these cultivars with another improved cultivar adapted to mechanical harvesting. It is resistant to blueberry stem blight,one of the most significant blueberry diseases of North Carolina.

The following were developed by Mark Ehlenfeldt, USDA, ARS, Rutgers Blueberry and Cranberry, Research Center, Chatsworth, New Jersey 08019, United States. Received 10/18/2005.

PI 641329. Vaccinium corymbosum L.
Cultivar. "Pink Lemonade"; "G-435"; "Pink Champagne"; CVAC 1687.

PI 641330. Vaccinium hybrid
Cultivar. "ARS 96-138"; "Pink Lemonade"; CVAC 1688. Pedigree - Selection of V. corymbosum with albino fruit.

The following were developed by Jim Spiers, USDA-ARS, Small Fruit Research Station, P. O. Box 287, Poplarville, Mississippi 39470, United States; Arlan D. Draper, 604 E. Park Dr., Payson, Arizona 85541, United States; Stephen Stringer, USDA,ARS Small Fruit Station, PO Box 287, 306 High Street, Popularville, Mississippi 39470, United States. Donated by Susan H. Harrin, USDA, ARS, SFRS, 306 South High Street, Poplarville, Mississippi 39470-0287, United States. Received 10/25/2005.

PI 641331. Vaccinium corymbosum L.
Cultivar. "Dixieblue"; MS 111; CVAC 1689. Pedigree - G144[US11-93(Jersey x Pioneer) x Darrow] x US75[Florida 4-B(Native V. darrowii clone) x Bluecrop]. Dixieblue - Southern highbush. Origin: USDA-ARS Small Fruit Research Station, Poplarville, MS. by S. J. Stringer, J. M. Spiers, and A. D. Draper. G144 x US75; cross made in mid 1970s at Beltsville, MD. Selected in 1979 and tested as MS 111; introduced inn 2005. Fruit: medium - large, flat, color, firmness, flavor and picking scar good; ripens approximately 10 days before Climax. Flowering approximately 7 days after Climax. Plant: vigorous, moderately spreading, round in shape

and mediu in height. Yield potential: medium - high. Propagation: softwood or hardwood cuttings. Adapted to the Coastal Plains and Gulf Coast regions of the U. S. Should be interplanted with other southern highbush cultivars to optimize earliness, yield and quality.

PI 641332. Vaccinium virgatum Aiton
Cultivar. "De Soto"; MS 63; CVAC 1690. Pedigree - T110 x T107. DeSoto. - Rabbiteye Origin: USDA ARS Small Fruit Research Station Poplarville, MS. by S. J. Stringer, J. M. Spiers, and A. D. Draper. T110 x T107; cross made in early 1970s at Beltsville, Maryland; selected in 1976, tested as MS 63; introduced in 2004. Fruit: medium - large; medium - light blue; scar and firmness good, flavor excellent; ripens about 14 days later than Tifblue, over a 6 week period or longer. Berry clusters: medium - loose. Flowering occurs approximately 21 days after Climax, providing insurance against late spring frosts. Plant: semi-dwarf, oderately spreading, medium vigor. Yield potential: medium - high. Propagation: softwood or hardwood cuttings. Adapted to the Gulf Coast and Southeastern United States.

PI 641333. Vaccinium corymbosum L.
Cultivar. "Gupton"; MS 548; CVAC 1691. Pedigree - M122 x MS6. Gupton - Southern highbush. Origin: USDA ARS Small Fruit Research Station by J. M. Spiers, S. J. Stringer, and A. D. Draper. M122 x MS6: cross made in mid 1980s at Beltsville, MD; sselected in 1991 and tested as MS 548; introduced in 2005. Fruit: medium - large; color, firmness, flavor, and picking scar good; ripens approximately 10 days before Climax. Plant: vigorous, upright. Yield potential: medium - high. Propagation: softwood or hardwood cuttings. Adapted to the Coastal Plains and Gulf Coast regions of the U. S. Should be interplanted with other southern highbus cultivars to optimize earliness, yield and quality.

PI 641334. Vaccinium darrowii Camp
Cultivar. "Native Blue"; MS 611; CVAC 1692. Pedigree - Florida 4B x US 799. Native Blue - ornamental evergreen blueberry (Vaccinium darrowii Camp. Origin: USDA ARS Small Fruit Research Station by J. M. Spiers, S. J. Stringer, and A. D. Draper. Florida 4B x US 799; cross made in early 1990s at Beltsville, MD. Selected in 1994 and tested as MS 611; introduced in 2004. Foliage: evergreen, glaucous; small delicate leaves, new leaf flushes with light pinkish hues which change to bluish green. PlantL low growing, compact, finely branched, hardy, vigorous. Fruit: small, dark, semi-sweet, flavorful. Propagation: softwood and hardwood cuttings. Adapted to the southeastern United States.

The following were collected by G. Ray Smith, Texas A&M University, Research & Extension Center, P.O. Box E, Overton, Texas 75684-0290, United States; Kenneth H. Quesenberry, University of Florida, Department of Agronomy, Forage Breeding and Genetics, Gainesville, Florida 32611-0500, United States. Received 05/10/1993.

PI 641335. Trifolium heldreichianum (Gibelli & Belli) Hausskn.
Wild. 90-129; G 31068. Collected 07/23/1990 in Bulgaria. Latitude 42° 5' N. Longitude 27° 35' E. Elevation 250 m. 5 km S of Gramatikovo on road from Malko Tarnovo to Micurin, Bulgaria. Thin brown loam, mixed grasses on slope oak scrub on crest of hill, rolling hills. Frequency of sample: Occasionally Comments: Found only at crest of small hill under oak scrub.

PI 641336. Trifolium heldreichianum (Gibelli & Belli) Hausskn.
Wild. 90-55A; G 31104. Collected 07/18/1990 in Khaskovo, Bulgaria. Latitude 41° 35' N. Longitude 25° 50' E. Elevation 710 m. Along road from Momchilgrad to Ivaylovgrad, Khaskovo, Bulgaria. Flat and some slope, mixed forbes and grasses, edge of woodland. Frequency of sample: Rarely seen.

PI 641337. Trifolium ochroleucum Huds.
Wild. 90-15; G 31117. Collected 07/16/1990 in Plovdiv, Bulgaria. Latitude 41° 55' N. Longitude 24° 50' E. Elevation 1000 m. 9-10 km south of Asenovgrad, Plovdiv, Bulgaria. Rocky thin soil, mixed shrubs, moutainous, 5-10% slope. Frequency of sample: Occasionally seen Comments: none.

The following were collected by Gary A. Pederson, USDA, ARS, Waste Management and Forage, Research Unit, Mississippi State, Mississippi 39762-5367, United States; Kenneth H. Quesenberry, University of Florida, Department of Agronomy, Forage Breeding and Genetics, Gainesville, Florida 32611-0500, United States. Received 11/29/1993.

PI 641338. Trifolium alpestre L.
Wild. 93-35; G 31146. Collected 08/03/1993 in Plovdiv, Bulgaria. Latitude 41° 48' N. Longitude 24° 7' E. Elevation 1550 m. Above Lake Vasil Kolarov near Cukura on road from Dospat to Batak, Plovdiv, Bulgaria. Roadside bank and ditch, mountainous, area had been cut or grazed and plants were growing close to the ground with, Ph 8.07, 60% sand, 17% silt, 23% clay sandy clay loam. Frequency of sample: Occasionally seen Comments: Short flowering stems, highest altitude that T. alpestre was collected in Bulgaria.

PI 641339. Trifolium alpestre L.
Wild. 93-80; G 31148. Collected 08/07/1993 in Bulgaria. Latitude 41° 39' N. Longitude 23° 24' E. Elevation 1480 m. Turetska Checkva tourist hut, Bulgaria. Road banks under pine forest, mountainous along stream, Ph 6.84, 93% sand, 7% silt, 0% clay, sandy. Frequency of sample: Occasionally seen Comments: none.

PI 641340. Trifolium fragiferum L.
Uncertain. 93-94; G 31172. Collected 08/09/1993 in Sofia, Bulgaria. Latitude 42° 20' N. Longitude 23° 32' E. Elevation 975 m. 1 km west of Samokov, Sofia, Bulgaria. Grassy, damp, low area, mountain valley, collection site grazed closely. Frequency of sample: Frequently seen Comments: none.

PI 641341. Trifolium medium L.
Uncertain. 93-24A; G 31191. Collected 08/02/1993 in Plovdiv, Bulgaria. Latitude 41° 40' N. Longitude 24° 42' E. Elevation 1380 m. Near Pamporovo 18-20 km north of Smoljan on road from Asvenograd to Smoljan, Plovdiv, Bulgaria. Trees along road, hilly, mountainous, Ph 7.78, 53% sand, 40% silt, 7% clay, sandy loam-loam, plants scattered over large area under trees. Frequency of sample: Frequently seen Comments: none.

PI 641342. Trifolium medium L.
Uncertain. 93-90; G 31196. Collected 08/08/1993 in Sofia, Bulgaria. Latitude 42° 9' N. Longitude 23° 23' E. Elevation 1460 m. 5-9 km

east of Rila Monastery at Rila tourist complex, Sofia,Bulgaria. On roadside, open meadow, mountainous. Frequency of sample: Rarely seen Comments: Very large yellow seeds with many per head, dark green leaves with no leaf mark.

PI 641343. Trifolium ochroleucum Huds.
Wild. 93-26A; G 31205. Collected 08/02/1993 in Plovdiv, Bulgaria. Latitude 41° 40' N. Longitude 24° 42' E. Elevation 1380 m. Near Pamporovo 18-20 km north of Smoljan on road from Asvenograd to Smoljan, Plovdiv, Bulgaria. Open area along stream, smaller, hilly, mountainous, Ph 7.78 53% sand, 40% silt, 7% clay, sand loam-loam. Frequency of sample: Abundant Comments: More mature heads and shorter plants than 93-26B.

PI 641344. Trifolium pannonicum Jacq.
Cultivated. 93-101; G 31210. Collected 08/10/1993 in Sofia, Bulgaria. Latitude 42° 31' N. Longitude 23° 31' E. Elevation 900 m. 2-3 km south of Pasarel on road to Sophia, Sofia, Bulgaria. Woodland and fields, low mountains, rolling hills, Ph 6.25, 56% sand, 37% silt, 7% clay, sandy loam. Frequency of sample: Occasionally seen Comments: Four plants growing in cultivated field with weeds.

PI 641345. Trifolium alpestre L.
Uncertain. 93-21; G 31215. Collected 08/04/1993 in Bulgaria. Latitude 41° 45' N. Longitude 24° 42' E. Elevation 907 m. 2-3 km south of Hvojna, Bulgaria. Along roadside near a mountain spring, trees, mountainous. Frequency of sample: Rarely seen Comments: none.

PI 641346. Trifolium repens L.
Uncertain. 93-52; G 31224. Collected 08/04/1993 in Sofia, Bulgaria. Latitude 42° 2' N. Longitude 23° 31' E. Elevation 1560 m. Near Hotel Bor in Semkovo, Sofia, Bulgaria. Grasses and forbes, mountain meadow along small creek bed. Ph 6.30, small type T. repens, 57% sand, 27% silt, 16% clay, sandy loam. Frequency of sample: Occasionally seen Comments: none.

The following were collected by Joseph H. Kirkbride, USDA/ARS, Beltsville Ag. Research Center, Systematic Botany and Mycology Laboratory, Beltsville, Maryland 20705-0000, United States; Paul R. Beuselinck, USDA, ARS, University of Missouri, Department of Agronomy, Columbia, Missouri 65211, United States; Walter Graves, University of California, Cooperative Extension Service, 777 E. Rialto Avenue, San Bernadino, California 92415-0730, United States. Received 04/19/1994.

PI 641347. Lotus maroccanus Ball
Wild. KBG 5660; G 31261. Collected 04/06/1989 in Morocco. Latitude 29° 40' N. Longitude 9° 30' W. Elevation 320 m. 33km form Tiznit on 7074 to Tafraout, Morocco. Along roadside, good soil drainage, sandy loam, limestone, pH 8.5, friable, rocky, stony, shallow depth, common density, heavy grazing, 200-225mm annual precipitation. Voucher specimens prepared by Dr. Joseph H. Kirkbride, UDSA-ARS. Sets of vouchers are available from: U.S. National Arboretum, Washington, D.C., Sytematic Botany and Mycology Laboratory, Beltsville, and St. Louis Botanical Gardens, St. Louis, MO.

PI 641348. Lotus arenarius Brot.
Wild. KBG 5744; G 31271. Collected 09/06/1989 in Morocco. Latitude 33° 16' N. Longitude 5° 29' W. Elevation 940 m. 19km N of Mirit on P24, Ifrane, Morocco. Good soil drainage, hillside, parent rock, sand, pH 8.0+, hard surface, stony, shallow, common density, heavy grazing, 700mm annual precpitation. Voucher specimens prepared by Dr. Joseph H. Kirkbride, UDSA-ARS. Sets of vouchers are available from: U.S. National Arboretum, Washington, D.C., Sytematic Botany and Mycology Laboratory, Beltsville, and St. Louis Botianical Gardens, St Louis, MO.

PI 641349. Lotus palustris Willd.
Wild. KBG 5833; G 31283. Collected 06/13/1989 in Morocco. Latitude 33° 27' N. Longitude 6° 5' W. Elevation 1050 m. 9 km W of Oulmes on S209, Khemisset, Morocco. Moderate-poor soil drainage, in a ditch, pH 8.2, friable, moderate depth, common density, 750 mm annual precipitation. Voucher specimens prepared by Dr. Joseph H. Kirkbride, UDSA-ARS. Sets of vouchers are available from: U.S. National Arboretum, Washington, D.C., Sytematic Botany and Mycology Laboratory, Beltsville, and St. Louis Botianical Gardens, St Louis, MO. Nodule.

PI 641350. Lotus collinus (Boiss.) Heldr.
Wild. KBG 5864; G 31297. Collected 06/18/1989 in Morocco. Latitude 35° 4' N. Longitude 5° 2' W. Elevation 400 m. 39km SE of Chechaouene on P39, Morocco. Good soil drainage, in a ditch, loam, parent rock: limestone, pH 8.5, friable, stony, shallow, common density, heavy grazing, 1200mm annual precipitation. Voucher specimens prepared by Dr. Joseph H. Kirkbride, UDSA-ARS. Sets of vouchers are available from: U.S. National Arboretum, Washington, D.C., Sytematic Botany and Mycology Laboratory, Beltsville, and St. Louis Botianical Gardens, St. Louis, MO. Nodule.

PI 641351. Lotus collinus (Boiss.) Heldr.
Wild. KBG 5893; G 31305. Collected 06/20/1989 in Morocco. Latitude 34° 19' N. Longitude 2° 5' W. Elevation 1130 m. 37km S of Oujda on P19, Oujda, Morocco. Good soil drainage, hillside, clay, parent rock:limestone, pH 9.0, hard surface, shallow, common density of specimen, 300-350mm precipitation. Voucher specimens prepared by Dr. Joseph H. Kirkbride, UDSA-ARS. Sets of vouchers are available from: U.S. National Arboretum, Washington, D.C., Sytematic Botany and Mycology Laboratory, Beltsville, and St. Louis Botianical Gardens, St Louis, MO.

PI 641352. Lotus ornithopodioides L.
Wild. KBG 5985; G 31322. Collected 06/29/1989 in Morocco. Latitude 35° 26' N. Longitude 5° 52' W. Elevation 70 m. 44km NE from Larache on P37,20km from junction P2+P37, Morocco. Good soil drainage, along roadside, clay loam soil, parent rock:limestone, pH 8.5, friable, stony, shallow depth, common density of specimen, heavy grazing, 700mm yr precipitation. Nodules collected.

PI 641353. Lotus ornithopodioides L.
Wild. KBG 5993; G 31326. Collected 06/30/1989 in Morocco. Latitude 35° 51' N. Longitude 5° 21' W. Elevation 5 m. 30km N of Tetouan on P28, 3km S of Frideq, Morocco. Good soil drainage, in ditch, clay loam, parent rock:shale, pH 8.5+, hard to moderate soil hardness, gritty to stony soil stoniness, common density, nil to heavy grazing, 575 mm annual precipitation.

The following were collected by G. Ray Smith, Texas A&M University, Research & Extension Center, P.O. Box E, Overton, Texas 75684-0290, United States; Kenneth H. Quesenberry, University of Florida, Department of Agronomy, Forage Breeding and Genetics, Gainesville, Florida 32611-0500, United States. Received 12/20/1993.

PI 641354. Trifolium fragiferum L.
Uncertain. 90-62; G 31350. Collected in Khaskovo, Bulgaria. Latitude 41° 30' N. Longitude 26° 5' E. Elevation 150 m. 3 km southeast of Ivaylovgrad very near border with Greece, Khaskovo, Bulgaria. Lowland open field, mixed forbes, mostly level topography. Frequency of sample: Rare.

PI 641355. Trifolium fragiferum L.
Uncertain. 90-77; G 31351. Collected in Burgas, Bulgaria. Latitude 41° 55' N. Longitude 26° 15' E. Elevation 250 m. 5 km northeast of Lefka on road to Topolovgrad, Burgas, Bulgaria. Dry clay loam, dry grasses, flat area with slopes nearby. Frequency of sample: Occasionally. This was a very dry site.

The following were donated by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg.-N, Lexington, Kentucky 40546-0019, United States. Received 07/06/1939.

PI 641356. Trifolium calcaricum J. L. Collins & Wieboldt
S-209-3; G 31386. Collected in United States.

PI 641357. Trifolium medium L.
S-25-14; G 31436. Collected in United States.

PI 641358. Trifolium medium L.
S-25-32; G 31438. Collected in United States.

PI 641359. Trifolium medium L.
S-25-39; G 31440. Collected in Canada.

PI 641360. Trifolium medium L.
S-25-40; G 31441. Collected in Canada.

PI 641361. Trifolium medium L.
S-25-41; Beaverlodge zigzag; G 31442. Collected in Canada.

PI 641362. Trifolium repens L.
S-35-45; G 31462. Collected in United Kingdom.

PI 641363. Trifolium repens var. biasolettii (Steud. & Hochst.) Asch. & Graebn.
S-149-2; G 31525.

PI 641364. Trifolium repens var. biasolettii (Steud. & Hochst.) Asch. & Graebn.
S-149-4; G 31526.

PI 641365. Trifolium rubens L.
S-72-12; G 31559. Collected in France.

PI 641366. Trifolium fragiferum L.
S-16-55; G 31575. Collected in France.

PI 641367. Trifolium hybridum L.
S-19-28; G 31590. Collected in France.

PI 641368. Trifolium ambiguum M. Bieb.
S-4-72; G 31636. Collected in Australia.

PI 641369. Trifolium ambiguum M. Bieb.
S-4-78; G 31640. Collected in Australia.

PI 641370. Trifolium ambiguum M. Bieb.
S-4-85; G 31645. Collected in Australia.

PI 641371. Trifolium ambiguum M. Bieb.
S-4-88; G 31648.

The following were donated by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg.-N, Lexington, Kentucky 40546-0019, United States; A.G. Fauhier, Canterbury, South Island, New Zealand. Received 07/06/1939.

PI 641372. Trifolium ambiguum M. Bieb.
S-4-91; G 31651. Collected in New Zealand.

The following were donated by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg.-N, Lexington, Kentucky 40546-0019, United States. Received 07/06/1939.

PI 641373. Trifolium ambiguum M. Bieb.
S-4-92; G 31652. Collected in New Zealand.

The following were donated by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg.-N, Lexington, Kentucky 40546-0019, United States; New Zealand Forage Germplasm Centre, Grassland Division, DSIR, Palmerston Nopth, North Island, New Zealand. Received 07/06/1939.

PI 641374. Trifolium ambiguum M. Bieb.
SPN 6977; S-4-93; AZ 2736; G 31653. Collected in New Zealand.

The following were donated by Central Siberian Botanical Gardens, Academy of Sciences of USSR, Siberian Branch, Novosibirsk, Novosibirsk 630090, Russian Federation. Received 05/22/1990.

PI 641375. Medicago sativa subsp. falcata (L.) Arcang.
Wild. W6 4288. Collected in Russian Federation. Tuva Hondelen.

PI 641376. Medicago sativa subsp. falcata (L.) Arcang.
Wild. W6 4311. Collected in Russian Federation. North Tuva.

PI 641377. Medicago sativa subsp. falcata (L.) Arcang.
Wild. W6 4313. Collected in Russian Federation. Latitude 53° 27' N. Longitude 91° 48' E. Altai.

The following were donated by N.I. Vavilov Institute of Plant Industry, 44 Herzen Street, Leningrad, Leningrad 190000, Russian Federation. Received 07/24/1990.

PI 641378. Medicago sativa L. **subsp. sativa**
Cultivar. "ARMIANSKAJA"; VIR-39955; W6 4771. Collected in Armenia.

PI 641379. Medicago sativa L. **subsp. sativa**
Cultivar. "APARANSKAJA-40"; VIR-46530; W6 4775. Collected in Armenia.

PI 641380. Medicago sativa subsp. caerulea (Less. ex Ledeb.) Schmalh.
Cultivated. VIR-28645; W6 4794. Collected in Russian Federation. Latitude 48° 45' N. Longitude 44° 30' E. Volgograd Region.

PI 641381. Medicago sativa subsp. falcata (L.) Arcang.
Cultivar. "DIKORASTUSCAJA"; VIR-15717; W6 4801. Collected in Russian Federation. Latitude 56° 5' N. Longitude 92° 46' E. Krasnojarsk Region.

PI 641382. Medicago sativa subsp. falcata (L.) Arcang.
Cultivated. VIR-19946; W6 4802. Collected in Russian Federation. Krasnodar Territory.

PI 641383. Medicago sativa subsp. falcata (L.) Arcang.
Cultivar. "KINEL'SKAJA-6"; VIR-26683; W6 4803. Collected in Russian Federation. Latitude 55° 27' N. Longitude 78° 18' E. Kuibyshev Region.

PI 641384. Medicago sativa subsp. falcata (L.) Arcang.
Cultivar. "OMSKAJA 2251"; VIR-26689; W6 4804. Collected in Russian Federation. Onisk region.

PI 641385. Medicago sativa subsp. falcata (L.) Arcang.
Cultivar. "STEPNAJA-600"; VIR-26771; W6 4805. Collected in Russian Federation. Voronezh Region.

PI 641386. Medicago sativa subsp. falcata (L.) Arcang.
Cultivar. "BUZULUKSKAJA"; VIR-27941; W6 4807. Collected in Russian Federation. Latitude 51° 30' N. Longitude 45° 55' E. Saratov Region.

PI 641387. Medicago sativa subsp. falcata (L.) Arcang.
Cultivar. "ZELTOGIBRIDNAJA NO. 5442"; VIR-28012; W6 4808. Collected in Russian Federation. Latitude 51° 30' N. Longitude 45° 55' E. Saratov Region.

PI 641388. Medicago sativa subsp. falcata (L.) Arcang.
Cultivar. "DIKORASTUSCAJA"; VIR-299; W6 4809. Collected in Russian Federation. Latitude 55° 0' N. Longitude 73° 24' E. Omsk Region.

PI 641389. Medicago sativa subsp. falcata (L.) Arcang.
Cultivar. "PAVLOVSKAJA-7"; VIR-33298; W6 4810. Collected in Russian Federation. Latitude 51° 40' N. Longitude 39° 13' E. Voronezh Region.

The following were donated by P. N. D. Seymour, University of Alberta, Devonian Botanic Gardens, Edmonton, Alberta, Canada. Received 02/11/1990.

PI 641390. Medicago sativa L. **subsp. sativa**
Cultivated. 243; W6 4940. Collected in Georgia. Academy of Science.

The following were collected by K.A. Lesins. Donated by P. N. D. Seymour, University of Alberta, Devonian Botanic Gardens, Edmonton, Alberta, Canada. Received 02/11/1990.

PI 641391. Medicago papillosa Boiss.
Wild. 894; W6 5248. Collected in Turkey. Alisehir.

PI 641392. Medicago prostrata Jacq.
Wild. 472; W6 5626. Collected 1959 in Italy. Latitude 45° 39' N. Longitude 13° 49' E. Presecco, Trieste.

The following were donated by P. N. D. Seymour, University of Alberta, Devonian Botanic Gardens, Edmonton, Alberta, Canada. Received 02/11/1990.

PI 641393. Medicago sativa L. **subsp. sativa**
Wild. 903; W6 5720. Collected in Turkey.

PI 641394. Medicago sativa subsp. falcata (L.) Arcang.
Cultivated. 1822; W6 5832. Collected in Germany.

PI 641395. Medicago sativa nothosubsp. varia (Martyn) Arcang.
Cultivated. 1978; W6 5858. Collected in Russian Federation. Latitude 57° 11' N. Longitude 39° 23' E. Rostov on Don.

The following were collected by D. Cornelius. Donated by P. N. D. Seymour, University of Alberta, Devonian Botanic Gardens, Edmonton, Alberta, Canada. Received 02/11/1990.

PI 641396. Medicago sativa subsp. falcata (L.) Arcang.
Wild. 2007; W6 5861. Collected in Turkey. Halik Koyu-Kara Province (upper Kizil Irmak river).

The following were donated by P. N. D. Seymour, University of Alberta, Devonian Botanic Gardens, Edmonton, Alberta, Canada. Received 02/11/1990.

PI 641397. Medicago sativa nothosubsp. varia (Martyn) Arcang.
Wild. 209; W6 5876. Collected 1960 in South Moravia, Czech Republic. Latitude 49° 12' N. Longitude 16° 38' E. Femedelska, Brno.

PI 641398. Medicago sativa subsp. falcata (L.) Arcang.
Cultivated. 2296; W6 5881. Collected in Russian Federation. Reprod. Centr.-Siber. Bot. Garden, Novosibirsk. Org. Southeast Alfai, High-mont. steepe.

PI 641399. Medicago sativa subsp. falcata (L.) Arcang.
Cultivated. 2297; W6 5882. Collected in Kazakhstan. Reprod.

Centr.-Siber. Bot. Garden, Novosibirsk. Org. Northern Kazakhstan, rocky steppe.

PI 641400. Medicago sativa subsp. falcata (L.) Arcang.
Cultivated. 2298; W6 5883. Collected in Russian Federation. Reprod. Centr.-Siber. Bot. Garden, Novosibirsk. Org. Tuvinskaya, steepe-meadow.

PI 641401. Medicago sativa subsp. falcata (L.) Arcang.
Cultivated. 2299; W6 5884. Collected in Russian Federation. Reprod. Centr.-Siber. Bot. Garden, Novosibirsk. Org. Tuvinskaya, steppe-meadow.

PI 641402. Medicago sativa subsp. falcata (L.) Arcang.
Cultivated. 2300; W6 5885. Collected in Russian Federation. Reprod. Centr.-Siber. Bot. Garden, Novosibirsk. Org. Tuvinskaya, steppe-meadow.

PI 641403. Medicago sativa subsp. falcata (L.) Arcang.
Cultivated. 2301; W6 5886. Collected in Russian Federation. Reprod. Centr.-Siber. Bot. Garden, Novosibirsk. Org. Central Alfai, rocky hillside.

The following were collected by Aellen. Donated by P. N. D. Seymour, University of Alberta, Devonian Botanic Gardens, Edmonton, Alberta, Canada. Received 02/11/1990.

PI 641404. Medicago sativa subsp. falcata (L.) Arcang.
Wild. 2875; W6 5889. Collected in Iran.

The following were donated by P. N. D. Seymour, University of Alberta, Devonian Botanic Gardens, Edmonton, Alberta, Canada. Received 02/11/1990.

PI 641405. Medicago sativa subsp. glomerata (Balb.) Rouy
Wild. 32; W6 5897. Collected 1959 in France. Latitude 48° 52' N. Longitude 2° 20' E. Paris.

The following were collected by K.A. Lesins. Donated by P. N. D. Seymour, University of Alberta, Devonian Botanic Gardens, Edmonton, Alberta, Canada. Received 02/11/1990.

PI 641406. Medicago truncatula Gaertn.
Wild. 1267; W6 5984. Collected 1963 in Cyprus. Latitude 35° 15' N. Longitude 33° 29' E. Near Kythrea.

PI 641407. Medicago truncatula Gaertn.
Wild. 1267a; W6 5985. Collected 1963 in Cyprus. Latitude 35° 15' N. Longitude 33° 29' E. Near Kythrea.

PI 641408. Medicago truncatula Gaertn.
Wild. 2082; W6 6024. Collected 1968 in Malta. Latitude 35° 49' N. Longitude 14° 32' E. Kalafrana.

PI 641409. Medicago truncatula Gaertn.
Wild. 2476; W6 6052. Collected 1974 in Algeria. Latitude 36° 13' 48" N. Longitude 2° 52' 48" E. Berrouaghia, 12km to Berrouaghia from Medea.

PI 641410. Medicago truncatula Gaertn.
Wild. 2486; W6 6053. Collected 1974 in Algeria. Latitude 36° 13' 48" N. Longitude 2° 52' 48" E. Elevation 500 m. Berrouaghia from Medea.

PI 641411. Medicago truncatula Gaertn.
Cultivated. 712; W6 6106. Collected 1962 in Italy. Latitude 41° 17' N. Longitude 13° 32' E. 126km S of Rome, Itri.

The following were donated by P. N. D. Seymour, University of Alberta, Devonian Botanic Gardens, Edmonton, Alberta, Canada. Received 02/11/1990.

PI 641412. Medicago truncatula Gaertn.
Wild. 2415; W6 6141. Collected in Tunisia. Latitude 35° 39' N. Longitude 9° 3' E. 2km to Thala on road from Kalaa Khasba, (1km off Rohia).

PI 641413. Medicago truncatula Gaertn.
Wild. 2518; W6 6143. Collected in Algeria. Latitude 35° 26' 24" N. Longitude 1° 46' 12" E. Near Mahdia.

The following were donated by N.I. Vavilov Institute of Plant Industry, 44 Herzen Street, Leningrad, Leningrad 190000, Russian Federation. Received 12/23/1991.

PI 641414. Medicago carstiensis Jacq.
Cultivated. Kat. No. 44113; W6 9383. Collected in Russian Federation.

The following were collected by Robert Klein, Washington State University, Irrigated Agriculture Res. & Ext. Center, Route 2, Box 2953-A, Prosser, Washington 99350-9687, United States. Received 11/18/1992.

PI 641415. Medicago sativa L. **subsp. sativa**
Cultivated. W6 11066. Collected 09/01/1992 in China. Latitude 43° 47' 24" N. Longitude 87° 34' 48" E. Market place, Urumqi, Xinjiang Province.

The following were donated by N.I. Vavilov Research Institute of Plant Industry, 44, B. Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation. Received 03/23/1993.

PI 641416. Medicago sativa subsp. falcata (L.) Arcang.
Cultivar. "IAKUTKSKAIA ZIOLTAIA"; VIR 44033; W6 11465. Collected in Russian Federation. Iakutsk.

The following were collected by M.B. Thapa. Donated by Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 11/30/1993.

PI 641417. Medicago sativa subsp. falcata (L.) Arcang.
Wild. W6 14159. Collected 10/1987 in Nepal. Latitude 29° N. Longitude 84° E. Elevation 2774 m. Kagbeni, Mustang.

The following were developed by V. Radeva; Z. Georgiev; V. Blajev; B. Vassileva. Donated by Rada Koeva, Institute for Plant Genetic Resources "K. Malkov", Sadovo, Plovdiv 4122, Bulgaria. Received 05/23/1994.

PI 641418. Medicago sativa L. **subsp. sativa**
Cultivar. "VICTORIA"; W6 15598. Pedigree - Pleven 6, Dunavka, Elga, Dv puits, Kodi, Pleven. Synthetic cultivar for drought resistance. Tolerant to Verticillium alboatrum.

The following were developed by Mirchev. Donated by Rada Koeva, Institute for Plant Genetic Resources "K. Malkov", Sadovo, Plovdiv 4122, Bulgaria. Received 05/23/1994.

PI 641419. Medicago sativa L. **subsp. sativa**
Cultivar. "PRISTA 1"; W6 15599. Pedigree - Dunavka, Nadejda 2, Flemish cultivars. Synthetic cultivar for seed production.

The following were collected by Peter Cunningham, Dept. of Agriculture & Rural Affairs, Pastoral Research Institute, P.O. Box 180, Hamilton, Victoria 3300, Australia; Walter Graves, University of California, Cooperative Extension Service, 777 E. Rialto Avenue, San Bernadino, California 92415-0730, United States; Saddik Saidi, Morocco. Received 08/19/1994.

PI 641420. Trifolium pratense L.
Wild. MO63.CPG94; W6 15792. Collected 07/16/1994 in Morocco. Latitude 33° 29' 9" N. Longitude 6° 8' 45" W. Elevation 980 m. Near Oulmes, 18 km. west of Oulmes on road S209, Tiflet-Oulmes. Grazed. Slope 0-5%, aspect S. Light open. Soil loam on schist bedrock, pH 6.0. Rainfall 700 mm. Moist meadow in watercourse. Vegetation closed, seasonal tall grass. Surrounding veg. evergreen open forest with closed lower layers. Dominant tree species Quercus suber. Dom. shrub sp. Lavandula stoechas. Dom. herb/grass sp. perennial grass/clovers, couch, strawberry. Area sampled 20,000 sq. m. Population distribution patchy, abundance occasional. Growth habit semi-erect. Flower rare white in mix with red type.

PI 641421. Trifolium pratense L.
Wild. MO98.CPG94; W6 15827. Collected 07/19/1994 in Morocco. Latitude 33° 33' 3" N. Longitude 5° 6' 43" W. Elevation 1500 m. Near Ifrane, 3K from center of Ifrane toward El-Hajeb on road S309. Grazed, settlement. Slope 0-5%, aspect W. 1/4 shade. Soil loam on calcareous alluvium-bedrock, meadow peat-sod zone, pH 9.5-10.0. Moist, stream terrace. Vegetation closed, seasonal tall grass. Surrounding veg. evergreen forest, picnic area. Population abundance occasional, distribution patchy. Growth habit semi-erect. Flower color rose.

The following were collected by Peter Cunningham, Dept. of Agriculture & Rural Affairs, Pastoral Research Institute, P.O. Box 180, Hamilton, Victoria 3300, Australia; Walter Graves, University of California, Cooperative Extension Service, 777 E. Rialto Avenue, San Bernadino, California 92415-0730, United States; Badia Baya, Morocco. Received 08/19/1994.

PI 641422. Lotus corniculatus L.
Wild. M108.CPG94; W6 15837. Collected 07/19/1994 in Morocco. Latitude 33° 23' 15" N. Longitude 5° 9' 36" W. Elevation 1940 m. Near Azrou/Jbel Hebri, 12 k south of Azrou on road P21, Azrou-Midelt, 0.5 k to east of P21. Grazed, protected. Slope 11-40%, aspect S. 1/4 shade. Soil loam on limestone type rock, pH 6.5-9.0. Rainfall 700 mm. Seasonally inundated, moist, basin. Vegetation closed, seasonal tall grass. Surrounding veg. evergreen forest, pasture-range. Population abundance occasional, distribution patchy. Growth habit prostrate. Flower yellow.

The following were collected by Peter Cunningham, Dept. of Agriculture & Rural Affairs, Pastoral Research Institute, P.O. Box 180, Hamilton, Victoria 3300, Australia; Mustapha Bounejmate, Institut National de la Recherche Agrono, Programme Fourrages (INRA), B.P. 415, Rabat, Morocco; Walter Graves, University of California, Cooperative Extension Service, 777 E. Rialto Avenue, San Bernadino, California 92415-0730, United States; Saddik Saidi, Morocco. Received 08/19/1994.

PI 641423. Lotus corniculatus L.
Wild. M121.CPG94; W6 15850. Collected 07/20/1994 in Morocco. Latitude 33° 57' 16" N. Longitude 5° 3' 14" W. Elevation 1880 m. Near Ait-Oufeua, 2 k north of Ait-Oufeua on P21, Azrou-Midelt, 52 k northwest of Midelt. Grazed. Slope 6-10%, aspect SE. Area open. Soil loam, clay, heavy hydromorphic on calcareous limestone type bedrock, pH 9.5-10.0. Moist, ravine. Vegetation closed, evergreen tall grass. Surrounding veg. degraded evergreen forest and scrub. Population abundance frequent, distribution patchy. Growth habit prostrate. Flower yellow.

PI 641424. Lotus corniculatus L.
Wild. M145.CPG94; W6 15874. Collected 07/21/1994 in Morocco. Latitude 32° 40' 35" N. Longitude 5° 17' 32" W. Elevation 1675 m. Near Arhbalou-N-Serdane, next to village Arhbalou on P33, 45 k west of Aeida to K. Tadla. Grazed, hay. Slope 0-5%, aspect N. Open. Soil cracking clay on limestone bedrock, pH 10. Rainfall 350 mm. Moist, seasonally flooded, basin-swale. Veg. closed, seasonal tall grass. Surrounding veg. degrad. evergreen open forest with closed lower layers. Population abundance frequent, distribution patchy. Growth habit prostrate. Flower yellow.

PI 641425. Lotus corniculatus L.
Wild. M150.CPG94; W6 15879. Collected 07/21/1994 in Morocco. Latitude 32° 39' 35" N. Longitude 5° 24' 29" W. Elevation 1820 m. Near Azerzou, 2 k west of Azerzou on P33, Zeida to K. Tadla. Grazed, hay. Slope 0-5%, aspect S. Open. Soil cracking clay, bog peat on limestone bedrock, pH 9.5-10.0. Rainfall 450 mm. Moist, seasonally flooded, basin-spring fed. Vegetation closed, seasonal tall grass. Population abundance frequent, distribution patchy. Growth habit prostrate. Flower yellow.

The following were collected by Peter Cunningham, Dept. of Agriculture & Rural Affairs, Pastoral Research Institute, P.O. Box 180, Hamilton, Victoria 3300, Australia; Walter Graves, University of California, Cooperative Extension Service, 777 E. Rialto Avenue, San Bernadino, California 92415-0730, United States; Claudio Porqueddu, Sassari, Sardinia, Italy. Received 08/19/1994.

PI 641426. Trifolium pratense L.
Wild. S020.CPG94; W6 16125. Collected 07/04/1994 in Sardinia, Italy. Latitude 40° 34' 7" N. Longitude 9° 2' 54" E. Elevation 545 m. Near Ozieri, 6 k east of Ozieri on road SS128bis, Ozieri-Battada. Grazed. Slope 0-5%, aspect N. Area open. Soil clay, pH 7.0. Rainfall 670 mm. Moist, basin, swale zone. Vegetation closed, evergreen broad-leafed herb veg. Surrounding veg. dryland forage agri. Population abundance frequent, distribution patchy. Growth habit semi-erect. Flower purple/red.

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 1995.

PI 641427. Medicago sativa subsp. falcata (L.) Arcang.
Wild. W94012; W6 16616. Collected 09/05/1994 in Mongolia. Latitude 49° 8' 53" N. Longitude 106° 1' 56" E. Elevation 1128 m. 15-20 km north of Bayangol on ridge top, surrounded by hay fields. Mountain steppe. North-sloping ridge. 1-5% slope. Soil well drained, non-rocky.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 1995.

PI 641428. Medicago lupulina L.
Wild. W6 17263. Collected 08/29/1995 in Washington, United States. Elevation 70 m. From former homesite near upper Coyote Creek and upper Coyote Road. On Colville Indian Reservation near Nespelem. Site heavily infested with diffuse knapweed.

The following were collected by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg.-N, Lexington, Kentucky 40546-0019, United States; Kenneth H. Quesenberry, University of Florida, Department of Agronomy, Forage Breeding and Genetics, Gainesville, Florida 32611-0500, United States. Received 01/01/1996.

PI 641429. Trifolium wormskioldii Lehm.
Wild. Population. C-15; Sand Clover; W6 17540. Collected 06/04/1994 in California, United States. Latitude 38° 19' 5" N. Longitude 123° 4' 15" W. Elevation 15 m. Bodega Bay Marine Research Laboratory-Univ. CA-Davis; 5 km East Shore Drive, Sonoma County, California. Physical Site: sandy bluff overlooking Pacific Ocean; Exposure: open; Slope: none; Aspect: west; Soil: 87% sand, 13% silt, Sand;Stoniness: sandy; Drainage(1-well to 4-poor): 2; pH: 6.5; Associated Species: Lupinus variacolor,shoreline plants. Flower Color: red; Habit: decumbent; Relative Abundance: frequent to occasional.

The following were collected by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg.-N, Lexington, Kentucky 40546-0019, United States. Received 01/01/1996.

PI 641430. Trifolium wormskioldii Lehm.
Wild. Population. C-39; Sand Clover; W6 17541. Collected 06/07/1994 in California, United States. Latitude 36° 35' 44" N. Longitude 121° 57' 40" W. Elevation 8 m. Montrey Country Club, Pacific Grove, California; South Moss Beach, 0.4 km North of Bud Road, along 17 Mile Drive. Physical Site: sandy beach; Exposure: open beach; Slope: none; Aspect: west; Soil: 80% sand,13% silt,7% clay, Sandy Loam; Drainage(1-well, 4-poor): 1; pH: 5.7; Associated Species: beach plants. Flower Color: unknown; Habit: low; Relative Abundance: Occasional; Collector Notes: on beach, very sandy situation.

The following were collected by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg.-N, Lexington, Kentucky 40546-0019, United States; Warren M. Williams, AgResearch, Grasslands Research Centre, Grasslands Research Centre, Fritzherbert West, Private Bags 11008, Palmerston North, North Island, New Zealand; Veva Stansell, USDA Forest Service, G.B. Ranger District, Gold Beach, Oregon 97444, United States; Kenneth H. Quesenberry, University of Florida, Department of Agronomy, Forage Breeding and Genetics, Gainesville, Florida 32611-0500, United States. Received 01/01/1996.

PI 641431. Trifolium longipes Nutt.
Wild. Population. OR-9; W6 17547. Collected 08/03/1994 in Oregon, United States. Latitude 42° 24' 7" N. Longitude 124° 25' 19" W. Elevation 50 m. Located 3.2 km South of Gold Beach on Hunter Creek Rd, County Rd 3680 intersection. Physical Site: rocky slope; Exposure: open; Slope: 20 degrees; Aspect: south facing slope; Soil: Silt Loam; Stoniness: very; Drainage(1-well, 4-poor): 1; pH:7.0; Associated Species: conifers, grasses, sedums, dwarf Ceanothus pumilis. Flower Color: white and a little pink; Habit: upright; Pop. Character: scattered plants.

The following were collected by Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Nicolay Portinier, Kamorov Institute of Botany, St. Petersburg, Leningrad, Russian Federation; Nicolay Khitrov, Dokvchaev Soil Institute, Pygevsky, per., 7., Moscow, Moscow 109017, Russian Federation. Received 01/1996.

PI 641432. Lotus corniculatus L.
Wild. 0149; 003; W6 18304. Collected 09/07/1995 in Russian Federation. Latitude 45° 21' 42" N. Longitude 36° 57' 6" E. Elevation 60 m. Province Temrjuk/Novorossiysk, village Fontalovski. West of Temrjuk, 5 km. Past grazing, now settlement. Slope 0-5%, aspect NW. Open light. Soil clay, pH 7.2-7.4. Seasonally dry, quarry. Vegetation open, evergreen dwarf shrub steppe savanna. Surrounding vegetation agricultural/human disturbances, evergreen steppe. Edge of Hornbeam-Oak zone. Dominant shrub species Artemisia austriaca. Dominant herb/grass species Salvia sp., Inula sp., Festuca valesiaca, Agropyron sp. Population distribution patchy, abundance frequent. Growth habit semi-prostrate. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641433. Lotus corniculatus L.
Wild. 0162; 016; W6 18313. Collected 11/07/1995 in Russian Federation.

Latitude 45° 3' N. Longitude 37° 28' E. Elevation 80 m. Province Temrjuk/Novorossiysk. 2 km south of Gostagayevskaya. Past and current grazing. Slope 11-40%, aspect S. Open light. Soil clay, pH 7.5. Moist, seasonally dry, upper-mid slope. Vegetation open, evergreen dwarf scrub with scattered trees. Surrounding veg. evergreen tall grass, human disturbances. Dominant tree species Quercus sp. Dominant shrub species Carpinus sp., Quercus sp. Dominant herb/grass species Festuca v., Stipa sp., Agropyron. Population distribution patchy, abundance occasional. Growth habit semi-prostrate. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641434. Lotus corniculatus L.
Wild. 0183; 037; W6 18324. Collected 07/23/1995 in Russian Federation. Latitude 44° 17' 4" N. Longitude 41° 18' 25" E. Elevation 853 m. Southeast of Maykop, 5 km. northwest of Spokoynaya. Past grazed, now roadway. Slope 0-5%, aspect N. Light open. Soil clay with 60% gravel, pH slightly acid. Seasonally dry, ridgetop. Vegetation closed, evergreen short grass. Surrounding veg. open deciduous forest with closed lower layers. Dominant tree species Q. robur. Dominant shrub species Carpinus c., Q. petraea. Population distribution patchy, abundance frequent. Growth habit semi-erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641435. Lotus corniculatus L.
Wild. 0187; 041; W6 18327. Collected 07/24/1995 in Russian Federation. Latitude 44° 25' 7" N. Longitude 41° 25' 53" E. Elevation 610 m. Province Maykop, 5 km west of Otradnaya. Past logged, now settlement. Slope 0-5%,aspect S. Light open. Soil conglomerate w/clay between, pH 7.8. Seasonally dry, ridgetop. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding veg. open decid. forest with closed lower layers. Dominant tree specis Quercus sp., Q. robur. Dominant shrub species Carpinus c., Q. petraea. Dominant herb/grass species Trifolium sp. Population distribution uniform, abundant. Growth habit semi-erect. Flower yellow. Extensive regional climate data a vailable in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641436. Lotus corniculatus L.
Wild. 0189; 043; W6 18329. Collected 07/25/1995 in Russian Federation. Latitude 44° 13' N. Longitude 41° 51' E. Elevation 700 m. Province Maykop, 1 km northwest of Psauch'ye-Dakha. Past logged, now grazed. Slope 11-40%, aspect SE. Soil clay w/gravel, pH 7.4-8.0, some sand layer, mainly tertiary clays. Seasonally dry, upper slope, landslide slope. Vegetation closed, evergreen broad-leafed herb vegetation. Dominant tree species Quercus sp., Q. robur. Dominant shrub species Carpinus c., Q. petraea. Population distribution patchy, abundance frequent. Growth habit semi-erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

Unknown source. Received 01/1996.

PI 641437. Medicago sativa L. **subsp. sativa**
Wild. 0189; 056A; W6 18339.

The following were collected by Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Nicolay Portinier, Kamorov Institute of Botany, St. Petersburg, Leningrad, Russian Federation; Nicolay Khitrov, Dokvchaev Soil Institute, Pygevsky, per., 7., Moscow, Moscow 109017, Russian Federation. Received 01/1996.

PI 641438. Lotus corniculatus L.
Wild. 0205; 057; W6 18340. Collected 07/29/1995 in Russian Federation. Latitude 43° 27' 37" N. Longitude 43° 0' 38" E. Elevation 975 m. Province Nal'Chir/Prokhladnyy (Kabardin-Balkarskaya Republic), 5 km southwest of Bylym. Past logged, now grazed. Slope 0-5%, aspect SE. Light open. Soil sand & loam with gravel, pH 8.4-8.7, sediments of many sized materials. Seasonally dry, man made terraces with orchard berry production. Vegetation closed, evergreen tall grass. Surrounding vegetation open deciduous forest with closed lower layers. Dominant shrub species Origanum sp. Population distribution uniform, abundance frequent. Growth habit semi-erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641439. Lotus corniculatus L.
Wild. 0209; 061; W6 18343. Collected 07/30/1995 in Russian Federation. Latitude 44° 55' 10" N. Longitude 41° 8' 26" E. Elevation 152 m. Province/subdivision Maykop/Armavir, 5 km south of Armavir, valley of Ouropriva. Past logged, now grazed. Slope 0-5%, aspect E. Light 1/4 shade. Soil clay with gravel, pH 7.4. Seasonally dry, stream terrace, bottom of quarry. Vegetation open, evergreen dwarf shrub steppe savanna. Surrounding vegetation evergreen steppe. Dominant tree species Quercus sp., Q. robur. Dominant shrub species Prunus sp. Dominant herb/grass species Amygadus sp., Festuca sp. Population distribution patchy, abundance frequent. Growth habit semi-erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641440. Medicago sativa subsp. falcata (L.) Arcang.
Wild. 0211; 063; W6 18345. Collected 07/31/1995 in Russian Federation. Latitude 44° 39' 6" N. Longitude 40° 37' 47" E. Elevation 183 m. Province Maykop, 1 km northwest of Labinsk. Past logged, now grazed. Slope 0-5%, aspect S. Light 1/4 shade. Soil loam with gravel, pH basic. Seasonally dry, alluvial stream terrace. Vegetation closed, evergreen tall grass and evergreen broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant shrub species Carpinus sp, Q. petraea. Population distribution patchy, abundance occasional. Growth habit erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641441. Lotus corniculatus L.
Wild. 0214; 066; W6 18347. Collected 08/03/1995 in Russian Federation. Latitude 44° 22' 15" N. Longitude 40° 22' 52" E. Elevation 549 m. Southeast of Maykop, 2 km. southeast of Novosvobodnaya. Past logged, now grazed. Slope 0-5 to 6-10%, aspect SW. Light open. Soil clay, pH 3.8-4.5. Moist to seasonally dry, upper slope. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant shrub species Carpinus sp., Q. petraea. Dominant herb/grass species legume, Trifolium, Lotus, Festuca pratensis. Population distribution uniform, abundant. Growth habit semi-erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641442. Medicago sativa subsp. falcata (L.) Arcang.
Wild. 0218; 070; W6 18350. Collected 08/05/1995 in Russian Federation. Latitude 44° 25' 54" N. Longitude 40° 13' 53" E. Elevation 518 m. Province Maykop, south of Maykop, 1 km north of Abadzekhskaya. Past logged, now grazed, mowed hay. Slope 11-40%, aspect S. Light open. Soil limestone, clay, pH 7.8. Seasonally dry, upper slope. End of terrace, near stream, edge of field. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Hornbeam-Oak. Dominant shrub species Carpinus sp., Q. petraea. Dominant herb/grass species legumes, Festuca pratensis. Population distribution uniform, abundant. Growth habit erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641443. Medicago sativa subsp. falcata (L.) Arcang.
Wild. 0222; 074; W6 18353. Collected 08/10/1995 in Russian Federation. Latitude 44° 23' 5" N. Longitude 39° 55' 35" E. Elevation 366 m. Province Maykop, 30 km southwest of Maykop, village of Bizvodnah. Past logged, now grazed. Slope 0-5%, aspect S. Light 1/4 shade. Soil clay, colluvial sediments, pH 7.7. Seasonally dry, lower-mid slope. Vegetation closed, evergreen tall grass.Surrounding veg. open deciduous forest with closed lower layers. Dominant tree species Hornbeam-Oak. Dominant shrub species Carpinus sp., Q. petraea. Population distribution patchy, abundance frequent. Growth habit erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641444. Trifolium fragiferum L.
Wild. 0236; 088; W6 18364. Collected 08/17/1995 in Krasnoyarsk, Russian Federation. Latitude 44° 54' 39" N. Longitude 37° 57' 45" E. Elevation 70 m. Province Krymsk, between Krasnodar and Novorossiysk, west of Krymsk. Past and current grazing. Slope 6-40%, aspect NE. Light open. Soil calcareous loams/sands, clay, pH 7.6-7.9. Seasonally dry, lower to mid slope, active slope movement. Vegetation closed, seasonal broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Quercus robur, Quercus sp. Dominant shrub species Ribes sp. Dominant herb/grass species broadleaves, Trifoliums, Lotus corniculatus, Bermuda grass, Bothriochloa ischaemum, Senecio grandidentatus, Tussilago farfara, Coronilla varia, Xanthium strumarium, Daucus carota, Convolvulus arvensis, Achillea

millefolium. Population distribution uniform, abundant. Growth habit prostrate. Flower rose. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641445. Medicago minima (L.) Bartal.
Wild. 0241; 093; W6 18370. Collected 08/18/1995 in Russian Federation. Latitude 45° 16' 43" N. Longitude 36° 57' 57" E. Elevation 10 m. Province Temrjuk-Novorossiysk, southwest of Temrjuk, village Senah/Fanagaria-Greek ruins. Past settlement, now grazed. Slope 0-5%, aspect NE. Light open. Soil sand, transition vertisols, heavy clays, pH 7.0. Seasonally dry, sea level/terraces to mud volcano, 1-2 km2. Vegetation open, evergreen dwarf shrub steppe savanna. Surrounding vegetation seasonal tall grass. Dominant tree species Hornbeam-Oak, Russian Olive. Dominant shrub specie Artemisia austriaca. Dominant herb/grass species Elytrigia elongatum, Agropyron cristatum, Bermuda grass, puncture vine, may forbs, wild mustard, chicory. Population distribution patchy, abundance occasional. Growth habit prostrate. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641446. Lotus corniculatus L.
Wild. M112; 112; W6 18380. Collected in Russian Federation. Latitude 44° 40' 57" N. Longitude 37° 57' 8" E. Elevation 380 m. Province Novorossiysk, 3 km north of Kabardinka,. Past logged, now grazed. Slope 11-40%, aspect SW. Light open. Soil clay, pH 7.5-8.0, parent rock platey limestones. Seasonally dry, lower to upper slope. Vegetation closed, open deciduous forest with closed lower layers. Surrounding vegetation seasonal tall grass. Dominant tree species Quercus sp. Dominant shrub species Carpinus sp., Quercus sp. Dominant herb/grass species Achillea sp., Festuca sp., Agropyron cristatum, Phleom sp., Salvia sp., Sanguisorba minor, Plantago sp. Population abundant. Growth habit semi-erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641447. Lotus corniculatus L.
Wild. M126; 126; W6 18389. Collected 08/21/1995 in Russian Federation. Latitude 44° 33' 30" N. Longitude 38° 21' 48" E. Elevation 690 m. Province Novorossiysk, 10 km north of Michaelovski-Perival. Past logged, now grazed. Slope 0-5%, aspect NW. Light open. Soil clay, limestone/slate, shales, sandstones, pH 5.6-7.5. Seasonally dry, ridgetop, upper slope. Vegetation closed, evergeen broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Quercus sp. Dominant shrub species Caprinus sp., Quercus sp., Ribes sp. Dominant herb/grass species Trifolium sp., Festuca pratensis, Poa sp., Potentilla sp., Mdicago falcata, Onobrychis sp., Aster sp., Dactylis glomerata, Geranium sp. Population abundant. Growth habit semi-erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641448. Lotus corniculatus L.
Wild. M150; 150; W6 18407. Collected in Dagestan, Russian Federation. Latitude 43° 43' 20" N. Longitude 39° 40' 19" E. Elevation 90 m.

Province Dagomys-Babuk (Sochi), 2 km north of Volafka, along river. Past logged, now settlement. Slope 6-10%, aspect E, SE. Light 1/4 shade. Soil clay, parent rock clays, schists, pH 4.5-4.6. Seasonally dry, upper slope. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Quercus sp., Carpinus sp. Dominant shrub species Laurocerasus sp. Dominant herb/grass species ferns, Trifolium sp., Lotus corniculatus, Alien sorghum, Johnson Grass. Population abundance frequent. Growth habit semi-erect. Flower yellow. Extensive reginal climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641449. Lotus corniculatus L.
Wild. M156; 156; W6 18412. Collected 08/23/1995 in Russian Federation. Latitude 43° 45' 20" N. Longitude 39° 41' 41" E. Elevation 230 m. Province Souchi, 10 km north of Dagomys. Past logged, now grazed, roadway. Slope 11-40%, aspect S. Light open. Soil clay, limestone, calcareous soils, pH 7.8. Moist, mid slope. Vegetation closed, open deciduous forest with closed lower layers. Surrounding vegetation evergreen broad-leafed herb vegatation. Dominant tree species Quercus sp., Carpinus sp. Dominant shrub species Laurocerasus sp., Ribes sp. Dominant herb/grass species Trifolium sp., Bermuda, Aster sp. types. Population abundance frequent. Growth habit semi-erect. Flower yellow-cream. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641450. Lotus corniculatus L.
Wild. M158; 158; W6 18414. Collected 08/23/1995 in Russian Federation. Latitude 43° 33' 5" N. Longitude 39° 54' 30" E. Elevation 220 m. Province Sochi, 10 km north of Khosta at Krasnar Vove village. pH 7.5. Samples taken in orchard that was heavily grazed. Sampling terminated after soil pH determined to be basic. Parent rock schist with some limestone. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Carpinus sp., Quercus sp. Dominant shrub species Lauracerasus sp. Dominant herb/grass species Trifolium sp., Bermuda grass. Population abundance occasional. Growth habit semi-erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641451. Lotus corniculatus L.
Wild. M163; 163; W6 18419. Collected in Russian Federation. Latitude 43° 37' 8" N. Longitude 39° 49' 14" E. Elevation 100 m. Province Souchi, 2 km north of Ismyolfka/Metseska. Past logged, now grazed, Slope 0-5%, aspect S. Light open. Soil clay, limestone, schists on slopes, pH 6.9-7.0. Moist, floodplain. Vegetaton closed, evergreen broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Carpinus sp., Quercus sp. Dominant shrub species Sambucus sp., Ribes sp., Lauracerasus sp. Dominant herb/grass species Trifolium sp., Bermuda grass, Mentha a rvensis. Population distribution patchy. Growth habit semi-erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641452. Lotus corniculatus L.
Wild. 0003; 169; W6 18424. Collected 08/30/1995 in Russian Federation. Latitude 43° 56' 52" N. Longitude 40° 12' 31" E. Elevation 1900 m. Abago mountain. Natural meadows. Light open. Soil stony loam, pH 3.6-5.7. Moist. Vegetation closed, grasses, Dactylis glomerata, Agrostis sp., Poa sp., legumes, clovers, T. canescens. Population abundance frequent. Growth habit semi-erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641453. Trifolium canescens Willd.
Wild. 0051; 0170b; W6 18426. Collected 08/30/1995 in Russian Federation. Latitude 43° 56' 52" N. Longitude 40° 12' 31" E. Elevation 1900 m. Abago mountain. Natural meadows. Light open. Soil stony loam, pH 3.6-3.8. Moist. Vegetation closed, grasses, Dactylis glomerata, Agrostis sp., Poa sp., legumes, clovers, T. canescens. Population distribution patchy, abundance occasional. Growth habit semi-prostrate. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641454. Trifolium canescens Willd.
Wild. 0053; 0171b; W6 18429. Collected 08/31/1995 in Russian Federation. Latitude 43° 55' 48" N. Longitude 40° 14' 30" E. Elevation 1850 m. Province Maykop, 15 km southeast of Goozeripl. Past and current cutting. Slope 0-5%, aspect S. Light open. Soil loam with gravel, pH 4.2-4.1. Moist, low area in a saddle.Vegetation closed, evergreen tall grass. Surrounding veg. open evergreen and deciduous forest with closed lower layers. Dominant tree species Betula sp., Abies sp., Acer sp., Fagus sp. Dominant shrub species Laurocerasus sp., Rhododendron sp. Dominant herb/grass species mostly meadow grasses, Calamagrostis sp., Agrostis sp., few herbs. Population patchy, abundance occasional. Growth habit prostrate. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641455. Trifolium repens L.
Wild. 0006; 172; W6 18430. Collected 08/30/1995 in Russian Federation. Latitude 44° 5' 30" N. Longitude 40° 0' 56" E. Elevation 1650 m. Province Maykop, 25 km southwest of Dakhovskaya. Past logged, now grazed and roadway. Slope 6-10%, aspect S. Light open. Soil loam. Moist, mid slope. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding veg. open evergreen and deciduous forest with closed lower layers. Dominant tree species Fagus sp., Beech, Caprinus sp., Abies sp., Picea sp. Dominant shrub species Laurocerasus officinalis, Rhododendron. Dominant herb/grass species Trifolium sp., Plantago sp., Deschampsia cespetiosa, Alchemilla sp., Cirsium obvallatum, Rumex conferitus, Cephalaria gigantea. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641456. Trifolium pratense var. sativum Schreb.
Wild. 0056; 0174b; W6 18433. Collected 08/31/1995 in Russian Federation.

Latitude 43° 54' 30" N. Longitude 40° 16' E. Elevation 1880 m. Province Maykop, 21 km southeast of Goozeripl'. Past grazed, now deferred. Slope 6-10%, aspect SE. Light 1/4 shade. Soil loam with gravel, pH 4.2-4.0. Moist, upper slope. Vegetation closed, open deciduous forest with closed lower layers. Surrounding vegetation evergreen tall grass. Dominant tree species Betula sp. Dominant shrub species Laurocerasus sp., Rhododendron sp. Dominant herb/grass species meadow transition heracleum sp., Festuca sp., Calamagrostis sp. Population distribution patchy, abundance occasional. Growth habit erect. Flower red. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641457. Lotus corniculatus L.
Wild. 0023; 188; W6 18442. Collected 08/31/1995 in Russian Federation. Latitude 44° 3' 30" N. Longitude 40° 1' 14" E. Elevation 1800 m. Province Maykop, 32 km. southwest of Dakhovskaya. Past logged, now grazed. Slope 6-10%, aspect S. Light open. Soil loam to clay. Moist to seasonally dry, upper to mid slope. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding vegetation evergreen open forest with closed lower layers. Dominant tree species Birch, Betula sp., Pinus sp., Acer sp., Fagus sp. Dominant shrub species Juniperus sp. Dominant herb/grass species Achemilla sp., Plantago sp., Festuca v., D eschampsia c., Phleum a. Population distribution patchy, abundance rare. Growth habit semi-erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641458. Lotus corniculatus L.
Wild. 0033; 199; W6 18447. Collected 09/01/1995 in Russian Federation. Latitude 44° 9' 28" N. Longitude 40° 1' 50" E. Elevation 1250 m. Province Maykop, 15 km southwest of Dakhovskaya. Past logged,now grazed.Slope 0-5%,aspect N. Light 1/4 shade. Soil loam, pH neutral. Moist to seasonally dry, lower slope. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding veg. open deciduous forest with closed lower layers. Dominant tree species Acer sp. Dominant shrub species Laurocerasus officinalis, Rosa sp. Dominant herb/grass species Geranium sanguineum, Clinopodium vulgare, Betonica macrantha, Brachypodium pinnatum, Calamagrostis, Phleum montanum. Population distribution uniform, abundant. Growth habit semi-prostrate. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641459. Lotus corniculatus L.
Wild. 0034; 200; W6 18448. Collected 09/01/1995 in Russian Federation. Latitude 44° 9' 28" N. Longitude 40° 1' 50" E. Elevation 1250 m. Province Maykop, 15 km southwest of Dakhovskaya. Past logged,now grazed. Slope 0-5%,aspect N. Light 1/4 shade. Soil loam, pH neutral. Moist to seasonally dry, lower slope. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding veg. open deciduous forest with closed lower layers. Dominant tree species Acer sp. Dominant shrub species Laurocerasus officinalis, Rosa sp. Dominant herb/grass species Geranium sanguineum, Clinopodium vulgare, Betonica macrantha, Brachypodium pinnatum, Calamagrostis, Phleum montanum. Population distribution uniform, abundant. Growth habit semi-prostrate. Flower yellow. Extensive

regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641460. Trifolium alpestre L.
Wild. 0038; 204; W6 18450. Collected 09/01/1995 in Russian Federation. Latitude 44° 9' 28" N. Longitude 40° 1' 50" E. Elevation 1250 m. Province Maykop, 15 km southwest of Dakhovskaya. Past logged,now grazed.Slope 0-5%, aspect N. Light 1/4 shade. Soil loam, pH neutral. Moist to seasonally dry, lower slope. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding veg. open deciduous forest with closed lower layers. Dominant tree species Acer sp. Dominant shrub species Laurocerasus officinalis, Rosa sp. Dominant herb/grass species Geranium sanguineum, Clinopodium vulgare, Betonica macrantha, Brachypodium pinnatum, Calamagrostis, Phleum montanum. Population distribution patchy, abundance occasional. Growth habit prostrate, flower erect. Flower purple. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641461. Lotus corniculatus L.
Wild. 0043; 209; W6 18453. Collected 09/03/1995 in Russian Federation. Latitude 44° 12' 29" N. Longitude 40° 15' 10" E. Elevation 550 m. Province Maykop, 5 km southeast of Dakhovskaya. Past logged,now roadway. Slope 0-5%,aspect SE. Light open.Soil loam upper to 25 cm,clay >25 cm, pH 5.9-5.3 with depth,parent rock colluvial clays. Seasonally dry, mid slope. Vegetation closed, evergreen tall grass and broad-leafed herb vegetation. Surrounding vegetation evergreen open forest with closed lower layers. Dominant tree species Quercus sp., Carpinus c. Dominant shrub species Rosa sp. Dominant herb/grass species Daucus c., Trifolium sp., Achillea sp., Geranium sp., Brachypodium p., Festuca sp., Calamagrostis sp., Agrostis sp., Phleum p. Population distribution patchy, abundance frequent. Growth habit semi-prostrate. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreen@ars-grin.gov).

PI 641462. Lotus corniculatus L.
Wild. 0063; 220; W6 18458. Collected 09/04/1995 in Russian Federation. Latitude 44° 37' 7" N. Longitude 40° 29' 24" E. Elevation 340 m. 1 km. east of Yeroslavskaya, 30+ km. east of Maykop. Area grazed. Slope 11-40%, aspect S. Light open. Soil clay, pH basic. Seasonally dry, lower slope. Vegetation closed, seasonal tall grass. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Crataegus sp., Quercus sp., Monogyna, Pentagyna. Dominant shrub species Rosa sp., Prunus sp. Dominant herb/grass species Achellea sp., Daucus c., thistle, bindweed, chicory, Bothriochloa i., Cynodon d. Population distribution patchy, abundance frequent. Growth habit semi-erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641463. Medicago sativa subsp. falcata (L.) Arcang.
Wild. 0066; 223; W6 18459. Collected 09/04/1995 in Russian Federation. Latitude 44° 28' 49" N. Longitude 40° 48' 53" E. Elevation 360 m. Province Maykop/Labinsk, 5 km south of Vladimirskaya. Past and current grazing, cut hay. Slope 11-40%, aspect SW. Light open. Soil

clay, pH basic-7.7. Moist, lower slope. Unstable site. Vegetation closed, seasonal tall grass. Surrounding veg. open deciduous forest with closed lower layers. Dominant tree species Crataegus sp., Quercus sp., Hornbeam-Oak. Dominant shrub species Sambucus sp., Rosa sp., Prunus sp. Dominant herb/grass species Achillea sp., Daucus c., Medicago f., Bothriochloa i., Erytregia sp. Population distribution uniform, abundant. Growth habit erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641464. Lotus corniculatus L.
Wild. 0068; 225; W6 18460. Collected 09/04/1995 in Russian Federation. Latitude 44° 28' 49" N. Longitude 40° 48' 53" E. Elevation 360 m. Province Maykop/Labinsk, 5 km south of Vladimirskaya. Past and current grazing, cut hay. Slope 11-40%, aspect SW. Light open. Soil clay, pH basic-7.7. Moist, lower slope. Unstable site. Vegetation closed, seasonal tall grass. Surruounding veg. open deciduous forest with closed lower layers. Dominant tree species Crataegus sp., Quercus sp., Hornbeam-Oak. Dominant shrub species Sambucus sp., Rosa sp., Prunus sp. Dominant herb/grass species Achillea sp., Daucus c., Medicago f., Bothriochloa i., Erytregia sp. Population distribution patchy, abundance frequent to occasional. Growth habit semi-erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641465. Lotus corniculatus L.
Wild. 0075; 232; W6 18464. Collected 09/05/1995 in Russian Federation. Latitude 44° 5' 4" N. Longitude 40° 50' 38" E. Elevation 640 m. Province Maykop/Labrinsk, 10 km southeast of Psebay. Past and current grazing. Slope 6-10%, aspect SW. Light open. Soil clay rock derived, pH 5.2-5.6. Moist to seasonally dry, lower slope, stream terrace. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Quercus robur, Quercus sp., Fagus o., Carpinus c. Dominant shrub species Laurocerasus officinalis, Crataegus sp., Rosa sp., Ribes sp. Dominant herb/grass species Lotus c., Achillea sp., Trifolium sp., wild strawberry, Geranium sp., Phleum p., other grasses. Population distribution uniform, abundant. Growth habit semi-erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641466. Lotus corniculatus L.
Wild. 0085; 242; W6 18468. Collected 09/05/1995 in Chelyabinsk, Russian Federation. Latitude 43° 55' N. Longitude 41° 14' E. Elevation 850 m. Province Cherkessk-Karachayeysk Republic, 2 km east of Pregradnayc. Past logged, now grazed, hayed. Slope 0-5%, aspect S. Light open. Soil loam, pH neutral. Moist to seasonally dry, stream terrace. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Quercus sp., Fagus o., Betula p. Dominant shrub species Laurocerasus officinalis, Ribes sp., Rosa sp. Dominant herb/grass species Achillea sp., Trifolium sp., Medicago sp., Geranium sp., Ambrosia sp., Daucus, Chicory, Dactylis g., Phleum p., Lolium p. Population distribution patchy, abundance frequent. Growth habit

semi-erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641467. Lotus corniculatus L.
Wild. 0088; 245; W6 18471. Collected 09/06/1995 in Chelyabinsk, Russian Federation. Latitude 43° 43' 8" N. Longitude 41° 35' 46" E. Elevation 1190 m. Province Cherkessk-Karachayeysk Republic (Karachayevo-Cherkesskaya Republic), 8 km south of Marvkha. Fields used for hay, no grazing. Slope 6-10%, aspect SW. Light open. Soil colluvial clays, rock clay schists, pH 5.0-5.3. Moist to seasonally dry, ridgetop, upper slope. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant shrub species Rhododendron sp., Rosa sp., Ribes sp. Dominant herb/grass species Trifolium sp., Lotus c., Achillea sp., Dandelion, Deschampsia c., Phleum p., Dactylis g., Agrostis sp., Calamagrostis sp. Population distribution patchy, abundance frequent. Growth habit semi-erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641468. Trifolium canescens Willd.
Wild. 104; 0260b; W6 18485. Collected 09/07/1995 in Karelia, Russian Federation. Latitude 43° 26' 25" N. Longitude 41° 41' 50" E. Elevation 2100 m. Province Teberda, Karachayevo-Cherkesskaya Republic, 7 km west of Teberda. Area deferred. Slope 41-60%, aspect SW. Light open. Soil loam with gravel, pH acidic. Moist, lower slope, ravine type zone. Vegetation closed, evergreen tall grass and broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Betula sp. Dominant shrub species Rhododendron sp., Juniperus sp. Dominant herb/grass species Trifolium sp., Alchemilla sp., Festuca sp., Deschampsia sp. Population distribution patchy, abundance occasional. Growth habit semi-prostrate. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641469. Lotus corniculatus L.
Wild. 105; 0261b; W6 18486. Collected 09/07/1995 in Karelia, Russian Federation. Latitude 43° 26' 25" N. Longitude 41° 41' E. Elevation 2100 m. Province Teberda, Karachayevo-Cherkesskaya Republic, 7 km west of Teberda. Area deferred. Slope 41-60%, aspect SW. Light open. Soil loam with gravel, pH acidic. Moist, lower slope, ravine type zone. Vegetation closed, evergreen tall grass and broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Betula sp. Dominant shrub species Rhododendron sp., Juniperus sp. Dominant herb/grass species Trifolium sp., Alchemilla sp., Festuca sp., Deschampsia sp. Population distribution patchy, abundance occasional. Growth habit semi-prostrate. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641470. Lotus corniculatus L.
Wild. 111; 0267b; W6 18495. Collected 09/09/1995 in Karelia, Russian Federation. Latitude 43° 15' 15" N. Longitude 41° 49' 43" E. Elevation 2050 m. Province Teberda, Karachayevo-Cherkesskaya Republic,

30 km southeast of Teberda near Klukhor Pass to Georgia. Past grazed, now roadway. Slope 6-10%, aspect SW. Light 1/4 shade. Soil loam. Seasonally dry, upper slope, rock outcrop. Vegetation closed, open evergreen and deciduous forest with closed lower layers. Surrounding vegetation evergreen tall grass and broad-leafed herb vegetation. Dominant tree species Pinus sp., Abies sp., Picea sp., Betula sp. Dominant shrub species Juniperus sp., Rhododendron sp. Dominant herb/grass species Achillea sp., Alchemilla sp., Trifolium sp., Vicia sp., Lotus c., Hedysarum h., Agrostis sp., Calamagrostis sp., Phleum p., Dactylis g., Festuca sp., Deschampsia c. Population distribution patchy, abundance frequent. Growth habit semi-prostrate. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641471. Lotus corniculatus L.
Wild. 0137; 269; W6 18497. Collected 09/07/1995 in Karelia, Russian Federation. Latitude 43° 28' 28" N. Longitude 41° 40' 54" E. Elevation 1800 m. Province Teberda, Karachayevo-Cherkesskaya Republic, 8 km west of Teberda. Past logged, now grazed. Slope 41-60%, aspect S. Light 3/4 shade to shaded. Soil loam, granitic derived. Seasonally dry, lower to mid slope. Vegetation closed, evergreen open forest with closed lower layers. Surrounding vegetation same. Dominant tree species Pinus syl., hamata on south slope, Abies n., Picea o. on north slope. Dominant shrub species Juniperus oblonga, Rosa sp., Ribes sp. Dominant herb/grass species Achillea sp., Trifolium sp., Coronilla sp., Lotus c., Deschampsia c., Festuca sp., Agrostis sp., Calamagrostis sp. Population distribution patchy, abundance frequent. Growth habit semi-prostrate. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641472. Lotus corniculatus L.
Wild. 0138; 270; W6 18498. Collected 09/07/1995 in Karelia, Russian Federation. Latitude 43° 28' 28" N. Longitude 41° 40' 54" E. Elevation 1800 m. Province Teberda, Karachayevo-Cherkesskaya Republic, 8 km west of Teberda. Past logged, now grazed. Slope 41-60%, aspect S. Light 3/4 shade to shaded. Soil loam, granitic derived. Seasonally dry, lower to mid slope. Vegetation closed, evergreen open forest with closed lower layers. Surrounding vegetation same. Dominant tree species Pinus syl., hamata on south slope, Abies n., Picea o. on north slope. Dominant shrub species Juniperus oblonga, Rosa sp., Ribes sp. Dominant herb/grass species Achillea sp., Trifolium sp., Coronilla sp., Lotus c., Deschampsia c., Festuca sp., Agrosits sp., Calamagrostis sp. Population distribution patchy, abundance frequent. Growth habit prostrate. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641473. Trifolium trichocephalum M. Bieb.
Wild. 0142; 274; W6 18502. Collected 09/07/1995 in Karelia, Russian Federation. Latitude 43° 29' 32" N. Longitude 41° 41' 39" E. Elevation 2700 m. Province Teberda, Karachayevo-Cherkesskaya Republic, 10 km northwest of Teberda. Past logged, now grazed. Slope 41-60%, aspect SW. Light open. Soil loam, shallow, rocks granitic. Seasonally dry, ridgetop, upper slope, alpine/sub-alpine. Vegetation closed, evergreen short grass. Surrounding vegetation evergreen open forest

with closed lower layers. Dominant tree species Pinus sp. on south slope, Picea o. and Abies n. on north slope. Dominant shrub species Juniperus oblonga, some Rosa sp. Dominant herb/grass species Achillea sp., Festuca varia ssp. chaculata, Helitrochicum agarium, Deschampsia sp. Population distribution patchy, abundance rare. Growth habit semi-erect. Flower cream-yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641474. Lotus corniculatus L.
Wild. M279; 279; W6 18507. Collected 09/14/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Dachovskaya. Now logged. Slope 6-10%, aspect NE. 1/4 shade. Soil loam. Moist, upper slope. Vegetation closed, deciduous forest, closed scrub with scattered trees. Dominant tree species Carpinus betulus, Quercus robur, Acer campestre. Dominant shrub species Rosa sp., Rubus caesius, Salix caprea, Rhododendron luteum. Dominant herb/grass species Deschampsia caespitosa, Molinia caerulea, Calamogrostis graecum, Trifolium medium. Population distribution uniform, abundance occasional. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641475. Trifolium medium L.
Wild. M282; 282; W6 18508. Collected 09/14/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Dachovskaya. Now logged. Slope 6-10%, aspect NE. 1/4 shade. Soil loam. Moist, upper slope. Vegetation closed, deciduous forest, scrub with scattered trees. Dominant tree species Carpinus betulus, Quercus robur, Acer campestre. Dominant shrub species Rosa sp., Rubus caesius, Salix caprea, Rhododendron luteum. Dominant herb/grass species Deschampsia caespitosa, Molinia caerulea, Calamogrostis sp., Doricnium graecum, Trifolium medium. Population distribution patchy, abundance frequent. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641476. Lotus corniculatus L.
Wild. M285; 285; W6 18510. Collected 09/14/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Dachovskaya. Now logged. Slope 6-10%, aspect NE. 1/4 shade. Soil loam. Moist, upper slope. Vegetation closed, deciduous forest, scrub with scattered trees. Dominant tree species Carpinus betulus, Quercus robur, Acer campestre. Dominant shrub species Rosa sp., Rubus caesius, Salix caprea, Rhododendron luteum. Dominant herb/grass species Deschampsia caespitosa, Molinia caerulea, Calamogrostis sp., Doricnium graecum, Trifolium medium. Population distribution uniform, abundance occasional. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641477. Lotus corniculatus L.
Wild. M286; 286; W6 18511. Collected 09/18/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Hadzoh. Now grazed. Slope 6-10%, aspect E. Light open. Moist, upper slope. Vegetation closed, seasonal broad-leafed herb vegetation. Dominant herb/grass

species Leontodon caucasicus, Plantago lanceolata, Fillipendula vulgaris, Lotus c., Elytrigia r. Population distribution uniform, abundance frequent. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641478. Lotus corniculatus L.
Wild. M292; 292; W6 18513. Collected 09/19/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Bezvodnaya. Now cut/grazed. Slope 0-5%. Open. Moist, ridgetop (watershed). Vegetation closed, seasonal short grass. Dominant herb/grass species Dactylis glomerata, Plantago lanceolata, Lotus corniculatus, Elytrigia repens. Population distribution uniform, abundance frequent. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641479. Lotus corniculatus L.
Wild. M294; 294; W6 18514. Collected 09/19/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Bezvodnaya. Now cut/grazed. Slope 0-5%. Open. Moist, ridgetop (watershed). Vegetation closed, seasonal short grass. Dominant herb/grass species Dactylis glomerata, Plantago lanceolata, Lotus corniculatus, Elytrigia repens. Population distribution uniform, abundance frequent. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641480. Lotus corniculatus L.
Wild. M296; 296; W6 18516. Collected 09/19/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Zazulin. Now cut/grazed. Slope 0-5%. Open. Moist, ridgetop (watershed). Vegetation closed, seasonal broad-leafed herb vegetation. Dominant herb/grass species Prunella vulgaris, Plantago lanceolata, Daucus carota, Fillipendula vulgaris, Leontodon caucasicus, Molinia caerulea, Dorycnium herbaceum. Population distribution uniform, abundance occasional. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641481. Lotus corniculatus L.
Wild. M299; 299; W6 18518. Collected 09/19/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Zazulin. Now cut/grazed. Slope 0-5%. Open. Moist, ridgetop (watershed). Vegetation closed, seasonal broad-leafed herb vegetation. Dominant herb/grass species Prunella vulgaris, Plantago lanceolata, Daucus carota, Fillipendula vulgaris, Leontodon caucasicus, Molinia caerulea, Dorycnium herbaceum. Population distribution uniform, abundance occasional-frequent. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641482. Lotus corniculatus L.
Wild. M301; 301; W6 18519. Collected 09/19/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Mimly. Now cut/grazed. Slope 0-5%. Open. Moist, ridgetop (watershed). Vegetation

closed, seasonal short grass. Dominant herb/grass species Deschampsia caespitosa, Molinia caerulea, Plantago lanceolata, Lotus corniculatus. Population distribution uniform, abundance frequent. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641483. Lotus corniculatus L.
Wild. M302; 302; W6 18520. Collected 09/19/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Mimly. Now cut/grazed. Slope 0-5%. Open. Moist, ridgetop (watershed). Vegetation closed, seasonal short grass. Dominant herb/grass species Deschampsia caespitosa, Molinia caerulea, Plantago lanceolata, Lotus corniculatus. Population distribution uniform, abundance frequent. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641484. Lotus corniculatus L.
Wild. M306; 306; W6 18523. Collected 09/20/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Temnolesskaya. Now grazed. Slope 0-6%. Open. Moist, ridgetop. Vegetation closed, seasonal short grass. Dominant herb/grass species Brachipodium sp., Plantago lanceolata, Phleum phleoides, Festuca rupicola. Population distribution uniform, abundance rare. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641485. Lotus corniculatus L.
Wild. M308; 308; W6 18524. Collected 09/21/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Mezmay. Now cut/grazed. Slope 0-6(10)%, aspect NE. Open. Moist, ridgetop. Vegetation closed, seasonal tall grass. Dominant herb/grass species Dactylis glomerata, Calamagrostis epigeios, Brachipodium sylvaticum, Elytrigia repens, Galega orientalis. Population distribution uniform (near road), abundance rare. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS anlaysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641486. Lotus corniculatus L.
Wild. M313; 313; W6 18525. Collected 09/21/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Hamyshki. Now cut/grazed. Slope 6-10%. Open. Moist, mid slope. Vegetation closed, seasonal short grass. Dominant herb/grass species Brachipodium p., Bromopsis riparia, Phleum p., Festuca rupicola, Koeleria cristata, Geranium saguineum, Centaurea l. Population distribution uniform, abundance occasinal. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641487. Lotus corniculatus L.
Wild. M315; 315; W6 18526. Collected 09/22/1995 in Krasnodar, Russian Federation. Latitude 44° 2' 59" N. Longitude 40° 1' 58" E. Krasnodarskiy kray, plateau Lagonaki. Now grazed. Slope 0-6%. Open. Moist, plateau. Vegetation closed, seasonal short grass. Dominant

herb/grass species Brachipodium pinnatum, Bromopsis riparia, Festuca rupicola, Koeleria cristata, Geranium saguineum, Plantago lanceolata. Population distribution uniform, abundance rare. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641488. Lotus corniculatus L.
Wild. M320; 320; W6 18530. Collected 09/22/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, near plateau Lagonaki. Now grazed. Slope 11-40%. Open. Moist, midslope. Vegetation closed, seasonal tall and short grass. Dominant herb/grass species Calamagrostis aruninacea, Agrostis tenuis, Tussilago farfara. Population distribution uniform, abundance occasional. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641489. Lotus corniculatus L.
Wild. M321; 321; W6 18531. Collected 09/22/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Dahovskaia. Now cut/grazed. Slope 0-6%. Open. Moist, mid slope. Vegetation closed, seasonal short grass. Dominant herb/grass species Agrostis gigantea, Carex metanostachya, Bromopsis riparia, Plantago lanceolata, Betonica o., Leontodon caucasicum. Population distribution uniform, abundance occasional. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS Analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641490. Lotus corniculatus L.
Wild. M323; 323; W6 18532. Collected 09/22/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Dahovskaia. Now cut/grazed. Slope 0-6%. Open. Moist, ridgetop. Vegetation closed, seasonal short grass. Dominant herb/grass species Agrostis tenuis, Bromopsis riparia, Plantago lanceolata, Leontodon caucasicum. Population distribution uniform, abundance occasional. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641491. Lotus corniculatus L.
Wild. M325; 325; W6 18533. Collected 09/24/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Krasnly, Dagestan. Now cut/grazed. Slope 0-6%. Open. Moist, ravine. Vegetation closed, seasonal short grass and broad-leafed herb vegetation. Dominant herb/grass species Deschampsia c., Inula h., Plantago lanceolata, Leontodon caucasicum, Agrimonia eupatoria. Population distribution uniform, abundance occasinal. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641492. Lotus corniculatus L.
Wild. M326; 326; W6 18534. Collected 09/24/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Krasnly, Dagestan. Now cut/grazed. Slope 0-6%. Open. Moist, ravine. Vegetation closed, seasonal short grass and broad-leafed herb vegetation. Dominant

herb/grass species Deschmapsia caespitoas, Inula h., Plantago l., Leontodon caucasicum, Agrimonia eupatoria. Population distribution uniform, abundance occasinal. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641493. Lotus corniculatus L.
Wild. M332; 332; W6 18539. Collected 09/30/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Krasnaia Polyana. Now grazed. Slope 11-40%, aspect S. Open. Moist, mid slope. Vegetation closed, seasonal short grass. Dominant herb/grass species Brachypodium sylvaticum, Dactylis glomerata, Cirsium sp., Geranium sp. Population distribution uniform, abundance rare. Growth habit spreading-prostrate. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641494. Lotus corniculatus L.
Wild. M341; 341; W6 18545. Collected 10/03/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Verhnie Tuby. Slope 6-11%, aspect SW. Open. Moist, upper slope. Vegetation closed, seasonal tall grass. Dominant herb/grass species Dactylis glomerata, Inula helenium, Cirsium caput-medusae, Geranium sp., Brachypodium silvatica. Population distribution uniform (near road), abundance occasinal. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641495. Lotus corniculatus L.
Wild. M342; 342; W6 18546. Collected 10/03/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Verhnie Tuby. Slope 6-11%, aspect SW. Open. Moist, upper slope. Vegetation closed, seasonal tall grass. Dominant herb/grass species Dactylis glomerata, Inula helenium, Cirsium caput-medusae, Geranium sp., Brachypodium silvatica. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641496. Lotus corniculatus L.
Wild. D105a; W6 18551. Collected 08/12/1995 in Russian Federation. Latitude 44° 24' 35" N. Longitude 39° 39' 35" E. Elevation 300 m. Southwest of Maykop, 2 km. north of Neffyanaya. Past logged, now grazed. Slope 0-5%, aspect N. 1/4 shade. Soil clay with some gravel, pH 5.1-5.5. Seasonally dry, mid slope. Vegetation closed, evergreen tall grass. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Hornbeam-Oak. Dominant shrub species Carpinus sp., Q. petraea. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641497. Lotus corniculatus L.
Wild. D109; W6 18552. Collected 08/12/1995 in Russian Federation. Latitude 44° 33' 20" N. Longitude 39° 14' 38" E. Elevation 210 m. Nearest s. Oktyabrsky. Roadside. 1/4 shade. Soil loam, pH 6.1-6.3. Vegetation roadside mixture including Trifolium pratense, T. bonannii, Lotus c., Medicago falcata. Extensive regional climate data available

in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641498. Lotus corniculatus L.
Wild. D11; W6 18553. Collected 07/10/1995 in Russian Federation. Latitude 45° 12' 30" N. Longitude 36° 50' E. Elevation 160 m. Komendantskaya hill. Undisturbed. Open. Soil salted clay, dry, pH 6.7-7.9. Vegetation sparse. Grasses Agropyron sp., Dactylis glomerata, Phleum pratense. Legumes Medicago falcata, Lotus corniculatus, Coronilla varia, Meliotus sp., annual clovers. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641499. Lotus corniculatus L.
Wild. A111; D111; W6 18554. Collected 08/15/1995 in Krasnodar, Russian Federation. Latitude 44° 41' 45" N. Longitude 38° 58' 32" E. Elevation 140 m. Province Krasnodar, Groreghgloviskoy, southwest of Krasnodar, village Chibiy/Kaluzhskaya. Past cultivated, now roadway. Slope 0-5%, aspect SE. Light 1/4 shade. Soil loam to clay, deluvial clays, pH 7.4. Seasonally dry, lower slope, lower mountains. Vegetation closed, seasonal broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Quercus robur. Dominant shrub species Caprinus sp., Quercus sp. Dominant herb/grass species Dorycnium intermedium, mix grass, legume, some forbs, Poterium p., Sanguisorba, T. apertum, T. caucasium, M. Falcatum. Population distribution patchy, abundance occasional. Growth habit semi-prostrate. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641500. Lotus corniculatus L.
Wild. A117; D117; W6 18557. Collected 08/17/1995 in Krasnodar, Russian Federation. Latitude 44° 47' 37" N. Longitude 38° 33' 28" E. Elevation 210 m. Province Krasnodar, southwest of Krasnodar, village Azovskaya. Past cultivated, now grazed. Slope 0-5%, aspect W. Light open. Soil loam, clay, glacial deposits, variable soils, pH 4.8-6.2, 0-15cm. Seasonally dry, mid slope. Vegetation closed, seasonal broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Fagus sp., Quercus sp. Dominant shrub species Ribes sp., Prunus sp., Caprinus sp., Crataegus sp. Population distribution patchy, abundance occasional. Growth habit semi-prostrate. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641501. Lotus corniculatus L.
Wild. A123; D123; W6 18558. Collected 08/17/1995 in Krasnoyarsk, Russian Federation. Latitude 44° 54' 39" N. Longitude 37° 57' 45" E. Elevation 70 m. Province Krymsk, between Krasnodar and Novorossiysk, west of Krymsk. Past and current grazing. Slope 6-40%, aspect NE. Light open. Soil clay, lithosols, calcareous loams/sands, pH 7.6-7.9. Seasonally dry, lower to mid slope, acitve slope movement. Vegetation closed, seasonal broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Quercus robur, Quercus sp. Dominant shrub species Ribes sp. Dominant herb/grass species broadleaves, Trifoliums, Lotus corniculatus, Bermuda grass, Bothriochloa ischaemum, Senecio

grandidentatus, Tussilago farfara, Coronilla varia, Xanthium strumarium, Daucus carota, Convolvulus arvensis, Achillea n., Achillea millefolium. Population distribution uniform, abundant. Growth habit semi-prostrate. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641502. Lotus corniculatus L.
Wild. A125; D125; W6 18559. Collected 08/17/1995 in Krasnoyarsk, Russian Federation. Latitude 44° 54' 39" N. Longitude 37° 57' 45" E. Elevation 70 m. Province Krymsk, between Krasnodar and Novorossiysk, west of Krymsk. Past and current grazing. Slope 6-40%, aspect NE. Light open. Soil clay, lithosols, calcareous loams/sands, pH 7.6-7.9. Seasonally dry, lower to mid slope, active slope movement. Vegetation closed, seasonal broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Quercus robur, Quercus sp. Dominant shrub species Ribes sp. Dominant herb/grass species broadleaves, Trifoliums, Lotus corniculatus, Bermuda grass, Bothriochloa ischaemum, Senecio grandidentatus, Tussilago farfara, Coronilla varia, Xanthium strumarium, Daucus carota, Convolvulus arvensis, Achillea n., Achillea millefolium. Population distribution uniform, abundant. Growth habit semi-prostrate. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641503. Lotus corniculatus L.
Wild. A131; D131; W6 18561. Collected 08/22/1995 in Russian Federation. Latitude 43° 50' 54" N. Longitude 39° 24' 32" E. Elevation 15 m. Province Lazarevskoye-Souchi, 10 km east of Soloniki. Past logged, now grazed. Slope 11-40%, aspect S. Light open. Soil clay, parent rock limestone, yellow soils, pH 7.4-7.5. Seasonally dry, lower to mid slope. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Quercus sp., Carpinus sp. Dominant shrub species Laurocerasus sp., Ribes sp. Dominant herb/grass species Trifolium sp., Festuca pratensis, Agrimonia eupatoria, Vicia sp., Dorycnium i., Senecio sp., Origonium regata, Coronilla varia, Ceranium sp., Inula britannia, Daucus carota, Plantago sp. Population abundance frequent. Growth habit semi-erect. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641504. Lotus corniculatus L.
Wild. A151; D151; W6 18566. Collected 09/06/1995 in Karelia, Russian Federation. Latitude 43° 51' 30" N. Longitude 41° 54' 7" E. Elevation 790 m. Province Karachayevo-Cherkesskaya Republic, 1 km northwest of Ordzhanikedevskiy. Grazed. Lower slope 6-10%, upper 41-60%, aspect SE. Light open. Soil sandy loam, pH upper 5.8, lower 6.3-6.4. Seasonally dry, lower slope, sandstone rock outcrop. Vegetation closed, seasonal tall grass. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Beech, Oak, Faus o., Quercus sp. Dominant shrub species Artemisia sp., Rosa sp. Dominant herb/grass species Achillea sp., Medicago sp., Bothriochloa i., Festuca v., Melica t. Population distribution patchy, abundance occasional. Growth habit semi-prostrate. Flower yellow. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641505. Lotus corniculatus L.
Wild. D162; W6 18567. Collected 09/18/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Hadzoh. Now grazed. Slope 6-10%, aspect E. Open. Moist, upper slope. Vegetation closed, seasonal broad-leafed herb vegetation. Dominant herb/grass species Leontodon caucasicus, Plantago lanceolata, Fillipendula vulgaris, Lotus c., Elytrigia repens. Population distribution uniform, abundance frequent. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641506. Lotus corniculatus L.
Wild. D170; W6 18569. Collected 09/21/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Hamyshki. Now cut/grazed. Slope 6-10%. Open. Moist, mid slope. Vegetation closed, seasonal short grass. Dominant herb/grass species Brachipodium p., Bromopsis riparia, Phleum p., Festuca rupicola, Koeleria cristata, Geranium saguineum, Centaurea l. Population distribution uniform (near road), abundance occasional. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641507. Lotus corniculatus L.
Wild. D172; W6 18570. Collected 09/22/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Dahovskaia. Now cut/grazed. Slope 0-6%. Open. Moist, mid slope. Vegetation closed, seasonal short grass. Dominant herb/grass vegetation Agrostis gigantea, Carex melanostachya, Bromopsis riparia, Plantago lanceolata, Betonica o., Leontodon caucasicum. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641508. Lotus corniculatus L.
Wild. D183; W6 18571. Collected 10/02/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Terzian. Slope 6-11%, aspect NW. Open. Moist, mid slope. Vegetation closed, seasonal short grass. Dominant herb/grass species Agrostis tenuis, Cirsium sp. Population distribution uniform (near road), abundance occasional. Growth habit spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641509. Lotus corniculatus L.
Wild. D185; W6 18572. Collected 10/02/1995 in Krasnodar, Russian Federation. Krasnodarskiy kray, nearest village is Verhnie Tuby. Now grazed. Slope 11-40%, aspect SE. Open. Moist, upper slope. Vegetation closed, seasonal tall grass. Dominant herb/grass species Dactylis glomerata, Elytrigia elongatiformis, Carduus laciniatus. Population distribution uniform, abundance rare. Growth spreading. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641510. Medicago cretacea M. Bieb.
Wild. D21; W6 18574. Collected 07/13/1995 in Russian Federation.

Latitude 44° 38' 48" N. Longitude 38° 3' E. Elevation 720 m. 5 km. north of Gelendzhik, village Marinarocha. Area grazed. Slope 11-40%, aspect S. Light open. Soil clay, pH 6.8-7.2. Seasonally dry, upper slope. Vegetation closed, evergreen and seasonal tall grass. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Crimea NC Oak. Dominant shrub species Carpinus sp., Quercus sp. Dominant herb/grass species A. cristatum, Bothriochloa ischaemum. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641511. Lotus corniculatus L.
Wild. D49; W6 18584. Collected 07/26/1995 in Chelyabinsk, Russian Federation. Latitude 44° 4' 25" N. Longitude 42° 21' 24" E. Elevation 823 m. 5 km. south of Bekeshevskaya. Past logged, now grazed. Slope 11-40%, aspect E. Open. Soil loam, pH 7.8-8.0. Seasonally dry, mid slope, high terrace. Vegetation closed, seasonal tall and short grass. Surrounding vegetation open deciduous forest with closed lower layers. Dominant shrub species Carpinus c., Q. petraea. Dominant herb/grass species Carex sp., Bothriochloa i., Festuca sp., Koeleria sp. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641512. Lotus corniculatus L.
Wild. D73; W6 18588. Collected 07/31/1995 in Russian Federation. Latitude 44° 39' 6" N. Longitude 40° 37' 47" E. Elevation 182 m. Province Maykop, 1 km northwest of Labinsk. Past logged, now grazed. Slope 0-5%, aspect S. Light 1/4 shade. Soil loam with gravel, pH basic. Seasonally dry, alluvial stream terrace. Vegetation closed, evergreen tall grass and broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant shrub species Carpinus sp., Quercus petraea. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641513. Lotus corniculatus L.
Wild. D78; W6 18590. Collected 08/05/1995 in Russian Federation. Latitude 44° 25' 54" N. Longitude 40° 13' 53" E. Elevation 513 m. Province Maykop, 1 km north of Abadzekhskaya, south of Maykop. Past logged, now grazed, mowed hay. Slope 0-5%, aspect S. Light open. Soil clay, pH 7.2. Seasonally dry, upper slope. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding veg. open deciduous forest with closed lower layers. Dominant tree species Hornbeam-Oak. Dominant shrub species Carpinus sp., Q. petraea. Dominant herb/grass species legumes, Festuca pratensis. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641514. Lotus corniculatus L.
Wild. D85; W6 18593. Collected 08/10/1995 in Russian Federation. Latitude 44° 23' 5" N. Longitude 39° 55' 35" E. Elevation 366 m. Province Maykop, 30 km southwest of Maykop, village Bizvodnah. Past logged, now grazed. Slope 0-5%, aspect S. Light 1/4 shade. Soil clay, pH 7.7. Seasonally dry, lower to mid slope. Vegetation closed, evergreen tall grass. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Hornbeam-Oak. Dominant shrub species Carpinus sp., Q. petraea. Extensive regional climate data

available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641515. Lotus corniculatus L.
Wild. D87; W6 18595. Collected 08/11/1995 in Russian Federation. Latitude 44° 14' 25" N. Longitude 39° 48' 54" E. Elevation 240 m. Near s. Srmyanskiy. Grazed meadow. 1/4 shade. Soil brown forest loam, pH 4.2-4.3. Moist. Vegetation closed. Grasses and legumes Lotus c., Trifolium hybridum, T. pratense, T. repens, T. bonnanii, T. campestre. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641516. Lotus corniculatus L.
Wild. D93; W6 18597. Collected 08/11/1995 in Russian Federation. Latitude 44° 15' 21" N. Longitude 39° 45' 12" E. Nearest s. Chernigovskaya. Roadside. 1/4 shade. Soil loam, pH 5.0-5.4. Moist. Vegetation roadside mixture including Lotus c., Trifolium bonannii, Galega officinalis. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641517. Lotus corniculatus L.
Wild. D96; W6 18598. Collected 08/11/1995 in Russian Federation. Latitude 44° 15' 28" N. Longitude 39° 41' 53" E. Elevation 520 m. Nearest s. Kushinka. Roadside. 1/4 shade. Soil loam, pH 5.0-7.7. Moist. Vegetation roadside mixture including Dactylis glomerata, Trifolium hybridum, T. medium, Lotus c. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 12/1996.

PI 641518. Medicago sativa nothosubsp. varia (Martyn) Arcang.
Wild. 96S-130; W6 18945. Collected 09/08/1996 in Mongolia. Latitude 49° 50' 31" N. Longitude 94° 1' 5" E. Elevation 1085 m. Ubs Aimag, Zuun-Gobi Sum, located in an experimental alfalfa seeding area about 100 km east of Ubs Noer. Experimental farm planted to alfalfa five years previously. Soils are brown sandy soils with very little gravel. Slope – flat to 2%. Aspect - rolling.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 07/28/1996.

PI 641519. Medicago rhodopea Velen.
Wild. B96-94; W6 19299. Collected 07/1996 in Bulgaria. Latitude 42° 5' 52" N. Longitude 24° 27' 25" E. Elevation 304 m. 2 km southwest of Nobusevo, 1km east of Isperishovo. Rocky, grassy hillside. Very arid. 6-7% slope. Alkaline soil (pH 9.5). northwest. yellow flower perennial.

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 03/06/1997.

PI 641520. Trifolium lupinaster L.
Wild. 96N-268; W6 19756. Collected 08/1996 in Mongolia. Latitude 49° 30' 13" N. Longitude 94° 21' 13" E. Elevation 1724 m. Uvs Aimag, 14 km northeast of Mondoohoo and 17 km south of Beruuturuun in the foothills of the Hanhohiy Mountains. 15% slope. Site is a dry hillside with east aspect, at the junction of two dry draws running toward east and the north. Exposed rock above site. Soils are medium brown. DOMINANT VEG: Poa pratensis, Sanguisorba officinalis, Thalictrum simplex, Carex pediformis, Vicia cracca, Astragalus adsurgens, Koelaria macrantha ECOLOGICAL ZONE: Transition forest steppe to steppe.

The following were collected by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg.-N, Lexington, Kentucky 40546-0019, United States; Anna Halford, U.S. Dept. of Interior, Bureau of Land Management, 785 N. Main St., Suite E, Bishop, California 93514, United States; Rhonda Gildersleve, Inyo-Mono County Extension, 207 West South Street, Bishop, California 93514, United States; Kenneth H. Quesenberry, University of Florida, Department of Agronomy, Forage Breeding and Genetics, Gainesville, Florida 32611-0500, United States. Received 10/1996.

PI 641521. Trifolium andersonii A. Gray
Wild. C-118; W6 19902. Collected in California, United States. Latitude 38° 15' 56" N. Longitude 118° 58' 51" W. Elevation 2554 m. Near town of Portola, Sierra Valley, in Mono County. South on A-23, 4-1/2 miles east off Route 70, 2 miles east. Along drive to lake in front of Beauty Peak. Rocky, sandy loam, very stoney, moderately drained soil. Occasional population. Very low growing, scattered plants. Heads shattered by truck traffic.

The following were collected by Warren M. Williams, AgResearch, Grasslands Research Centre, Grasslands Research Centre, Fritzherbert West, Private Bags 11008, Palmerston North, North Island, New Zealand; Alan V. Stewart, Pyne Gould Guinness Ltd., P.O. Box 3100, 411 Blenheim Road, Christchurch, South Island 8015, New Zealand. Received 01/1998.

PI 641522. Trifolium pratense L.
Uncertain. C139; W6 20361. Collected 08/1997 in California, United States. Elevation 0 m. In Fortuna settlement on side road to Rohnerville. Large roadside ungrazed grassy area. Loam, 0-5%, open seasonally dry.

PI 641523. Trifolium pratense L.
Wild. C150; W6 20367. Collected 08/1997 in California, United States. Elevation 0 m. Crescent City, near information center, Redwoods National Park on bank leading down to estuary. Sand, 0-5%, 1/4 shade, moist.

PI 641524. Trifolium repens L.
Uncertain. OR24; W6 20390. Collected 08/1997 in Oregon, United States. Latitude 43° 32' 33" N. Longitude 124° 9' 20" W. Elevation 89 m.

Templeton Valley at bridge, lower paddock (of two). From Hauser, 8 miles up the road to Templeton. Grazed, loam, 0-5% slope, open, seasonally dry, stream terrace. Recently sown with canarygrass and birdsfoot trefoil. Sampled near the fencelines.

PI 641525. Trifolium pratense L.
Uncertain. OR37; W6 20402. Collected 08/1997 in Oregon, United States. Latitude 44° 1' 14" N. Longitude 124° 2' 7" W. Elevation 81 m. East of Florence, Lane County toward Minerva. 5.4 miles up local road 5070. Grazed, loam, 0-5%, open, moist, stream terrace. Field not renewed in 41 years. Legumes dominant.

PI 641526. Trifolium repens L.
Uncertain. OR120; W6 20456. Collected 08/1997 in Oregon, United States. Latitude 44° 30' 37" N. Longitude 124° 1' 53" W. Elevation 100 m. Town of Ona, Beaver Creek Road, 1 mile before turnoff towards Ona. Upper slope of infertile hill (near house and barn) sloping down to river terrace. Grazed. Loam, 6-10% slope, open, moist/seasonally dry.

PI 641527. Trifolium wormskioldii Lehm.
Uncertain. W18; W6 20475. Collected 08/1997 in Washington, United States. Latitude 47° 4' 13" N. Longitude 124° 10' 22" W. Elevation 5 m. Ocean City. On beach and roadsides near beach. Sand dune, 0-5% slope, open, moist.

The following were collected by T. Austin Campbell, USDA, ARS, Building 002, Room 12, BARC West, Beltsville, Maryland 20705, United States. Received 04/1998.

PI 641528. Medicago lupulina L.
Wild. W6 20605. Collected 10/1996 in Yunnan, China. Latitude 26° 59' 13" N. Longitude 100° 14' 53" E. Elevation 2580 m. In pasture near village. Turf with few woody species. Base of hill in mountain valley. Moist, full sun, flat, loam, fairly stoney, medium drainage.

PI 641529. Trifolium repens L.
Wild. W6 20608. Collected 10/1996 in Yunnan, China. Latitude 26° 56' 6" N. Longitude 100° 14' 16" E. Elevation 2490 m. Along irrigation ditch among fields of maize and soybean. Plants found along farm road. May have been escapes from WWII American airbase. Many low forbs, moist. Full sun, flat, clay loam, fairly stoney, medium drainage.

PI 641530. Medicago lupulina L.
Wild. W6 20610. Collected 10/1996 in Yunnan, China. Latitude 25° 0' 4" N. Longitude 100° 5' 18" E. Elevation 2100 m. Very near building on animal path. Many maize, rice, and cassava fields in area. Sub-tropical grass abundant, moist. Partial shade, 15 degree slope, east aspect, laterite, medium drainage.

PI 641531. Medicago lupulina L.
Wild. W6 20611. Collected 10/1996 in Yunnan, China. Latitude 25° 39' 1" N. Longitude 100° 10' 33" E. Elevation 2160 m. Along road, near house. Many large rocks, few cedar trees and forbs, moist, full sun, 15 degree slope, southeast aspect, sandy loam, fairly stoney, medium drainage.

PI 641532. Medicago lupulina L.
Wild. W6 20612. Collected 10/1996 in Yunnan, China. Latitude 25° 33' 33" N. Longitude 100° 13' 48" E. Elevation 2070 m. Along road next to sheer bank and above paddy fields. Tall grass and trees, ferns, Eucalyptus, hibiscus in area. Seasonally dry, partial shade, 15 degrees slope, east aspect, sandy loam, fairly stoney, medium drainage.

PI 641533. Medicago lupulina L.
Wild. W6 20613. Collected 10/1996 in Yunnan, China. Latitude 25° 34' 49" N. Longitude 103° 8' 14" E. Elevation 2400 m. Along road on animal path. Low forbs and a few trees in area, rolling terrain, full sun, 15 degree slope, west aspect, clay, fairly stoney, medium drainage.

The following were collected by Stephanie Greene, USDA, ARS, National Temperate Forage Legume, Germplasm Resources Unit, Prosser, Washington 99350-9687, United States; Marina Gritsenko, USDA, ARS, Washington State University, Route 2, Box 2953A, Prosser, Washington 99350-9687, United States; Andrew Bell, USDA, ARS, Irrigated Agricultural Research, and Education Center, Prosser, Washington 99350-9687, United States. Received 09/29/1998.

PI 641534. Trifolium plumosum Douglas
Wild. 98SG-5; W6 20875. Collected 08/11/1998 in Oregon, United States. Latitude 45° 12' 55" N. Longitude 118° 36' 44" E. Elevation 1405 m. 48 km east of town of Ukiah, Oregon on State Route 244. Turn north on National Forest Road 21. After 6.4-8 km turn left on Nat'l Forest Secondary Route 2110. Drive 1.6 km. Site on south side of road. Logged, 6-10% sloper, southeast aspect, open area. Seasonally dry upper slope. Large amount of Trifolium plumosum in this area. Area mainly pine and open grasslands.

The following were collected by Dennis P. Sheehy, 69086 Allen Canyon Road, Wallowa, Oregon 97885, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Mark E. Majerus, USDA-NRCS, Plant Materials Center, Rt. 2, Box 1189, Bridger, Montana 59014-9718, United States; Susan R. Winslow, USDA-NRCS, Bridger PMC, Route 2, Box 1189, Bridger, Montana 59014-9718, United States. Received 05/05/1999.

PI 641535. Medicago sativa subsp. falcata (L.) Arcang.
Wild. 98HT-212; W6 21294. Collected 09/1998 in Mongolia. Latitude 48° 35' 10" N. Longitude 110° 41' 41" E. Elevation 1036 m. Binder Sum, Henti Aimag. Varied terrain on E bank of Onon River. Soils varied with microsite, but were generally fine sand along the river and sandy throughout the area, except where deeper soils had developed under tree overstory. Associated vegetation: Salix dominated diverse vegetation close to the river. On uplands away from the river and on southerly aspects, vegetation was grass steppe (Poa, Stipa, and Leymus). On northerly aspects, Larix forest steppe with some areas having more shrubs in the understory.

PI 641536. Medicago ruthenica (L.) Trautv.
Wild. 98HT-242; W6 21319. Collected 09/1998 in Mongolia. Latitude 49° 7' 56" N. Longitude 111° 6' 22" E. Elevation 1036 m. Binder Sum, Henti Aimag. Large mountain valley. Associated vegetation: Meadow steppe vegetation.

PI 641537. Medicago ruthenica (L.) Trautv.
Wild. 98HT-243; W6 21320. Collected 09/1998 in Mongolia. Latitude 49° 10' 56" N. Longitude 111° 20' 6" E. Elevation 1036 m. Binder Sum, Henti Aimag. Along a tributary stream drainage on N side of valley. Associated vegetation: Numerous forbs.

PI 641538. Medicago ruthenica (L.) Trautv.
Wild. 98HT-252; W6 21326. Collected 09/1998 in Mongolia. Latitude 49° 9' 23" N. Longitude 111° 25' 16" E. Elevation 1036 m. Daduul Sum, Henti Aimag. Stream terrace along a small tributary stream E of a larger river. Soils are sandy. Associated vegetation: Grass steppe in forest steppe.

PI 641539. Medicago ruthenica (L.) Trautv.
Wild. 98HT-261; W6 21335. Collected 09/1998 in Mongolia. Latitude 48° 57' 9" N. Longitude 111° 3' 40" E. Elevation 1036 m. Daduul Sum, Henti Aimag. Slope above valley floor. The entire area appears to have burned the previous year. Associated vegetation: Dominated by forbs released by the burn. Stipa and Bromus found on mounds. Astragalus and Melilotus are present but seeds have already been dispersed.

PI 641540. Medicago ruthenica (L.) Trautv.
Wild. 98HT-276; W6 21349. Collected 09/1998 in Mongolia. Latitude 48° 40' 32" N. Longitude 111° 10' 6" E. Elevation 1036 m. Bajnadarga Sum, Henti Aimag. Near a small stream tributary about 200 m W of Onon River. Associated vegetation: Typical grass steppe site dominated by genera of Elymus, Agropyron, and Medicago.

PI 641541. Medicago ruthenica (L.) Trautv.
Wild. 98HV-6; W6 21390. Collected 09/1998 in Mongolia. Latitude 49° 45' 1" N. Longitude 106° 17' 27" E. Elevation 732 m. Bayankharaat Sum, Selenge Aimag, 51 km NE of Darkhan. native; between strips of abandoned wheat crop land; sandy, chestnut, brown soil. Associated vegetation: Leymus chinensis, Cleistogenes squarrosa, Astragalus melilotoides, Vicia amoena, Stipa sibirica.

PI 641542. Medicago sativa nothosubsp. varia (Martyn) Arcang.
Wild. 98HV-16; W6 21398. Collected 09/1998 in Mongolia. Latitude 49° 45' 45" N. Longitude 106° 24' 6" E. Elevation 762 m. Bayankharaat Sum, Selenge Aimag, West of Yoroo/near 4th Brigade Hdqt. Sandy, Chestnut, Light brown soil, abandoned crop land area. Associated vegetation: Leymus chinensis, Stipa sibirica, Potentilla viscosa, Heteropappus biennis.

PI 641543. Medicago sativa subsp. falcata (L.) Arcang.
Wild. 98HV-60; W6 21441. Collected 09/1998 in Mongolia. Latitude 49° 49' 31" N. Longitude 107° 27' 15" E. Elevation 732 m. Huder Sum, Selenge Aimag, 7 km west of Huder. light brown soil, native grass strip along wheat fields. Associated vegetation: Medicago falcata, Leymus chinensis, Stipa sibirica, Chenopodium album.

PI 641544. Medicago sativa subsp. falcata (L.) Arcang.
Wild. 98HV-73; W6 21454. Collected 09/1998 in Mongolia. Latitude 49° 57' 57" N. Longitude 107° 16' 55" E. Elevation 762 m. Huder Sum, Selenge Aimag, Khazai Brigade. Low bench overlooking Tsokh River, grass-forb type, light-textured brown soil. Associated vegetation:

Leymus chinensis, Bromus inermis, Artemisia vulgaris, Medicago falcata, Heteropappus biennis.

PI 641545. Medicago sativa subsp. falcata (L.) Arcang.
Wild. 98HV-74; W6 21455. Collected 09/1998 in Mongolia. Latitude 49° 59' 7" N. Longitude 107° 13' 37" E. Elevation 732 m. Huder Sum, Selenge Aimag, 5 km west of Khazai Brigade headquarters. Tsokh River Valley, Medicago-grass river bottom, alluvial soils, sandy-light brown soil. Associated vegetation: Medicago falcata, Stipa sibirica, Elymus dahuricus, Ulmus pumila, Artemisia vulgaris.

PI 641546. Medicago sativa subsp. falcata (L.) Arcang.
Wild. 98HV-101; W6 21481. Collected 09/1998 in Mongolia. Latitude 50° 17' 59" N. Longitude 104° 58' 51" E. Elevation 732 m. Tushig Sum, Selenge Aimag, 10 km west of Tushig along Dzelter River. Meadow brown soil, alluvium river bottom adjacent to Dzelter River, grass-forb type. Associated vegetation: Delphinium grandiflora, Elymus excelsus, Elymus gmelinii, Trisetum sibiricum, Artemisia laciniata, Geranium pratense, Achillea asiatica, Vicia amoena.

PI 641547. Medicago lupulina L.
Wild. 98HV-110; W6 21490. Collected 09/1998 in Mongolia. Latitude 50° 18' 32" N. Longitude 105° 1' 25" E. Elevation 732 m. Tushig Sum, Selenge Aimag, 1 km west of Tushig. Wet meadow, dark brown meadow soil, Agrostis mongolica-Forb type, along small stream draining into Dzelter River. Associated vegetation: Agrostis monogolica, Geum aleppicum, Mentha arvensis, Sanguisorba officinalis, Medicago lupulina.

PI 641548. Medicago sativa subsp. falcata (L.) Arcang.
Wild. 98HV-114; W6 21494. Collected 09/1998 in Mongolia. Latitude 50° 1' 43" N. Longitude 105° 17' 27" E. Elevation 792 m. Tsagaanuur Sum, Selenge Aimag, 15 km SW of Tsagaanuur. Brown soil, mid-slope of gentle rolling hills. Associated vegetation: Stipa grandis, Stipa sibirica, Potentilla viscosa, Koeleria macrantha, Agropyron cristatum, Artemisia frigida, Lilium tenuifolium, Saussurea salicifolia, Veronica incarna, Kochia prostrata, Cleistogenes squarrosa.

PI 641549. Medicago platycarpos (L.) Trautv.
Wild. 98HV-135; W6 21510. Collected 09/1998 in Mongolia. Latitude 49° 47' 55" N. Longitude 101° 50' 12" E. Elevation 1524 m. Tarailan Sum, Hovsgol Aimag, 32 km NW of Tarailan. Open mountain meadow with scattered larch near crest of hill, mountain brown soil. Associated vegetation: Stipa baicalensis, Koeleria macrantha, Leontopodium ochroleucum, L. campestre, Leymus chinesis, Elymus gmelinii, Festuca lenensis, Potentilla tanacetifolia, Hierochloe glabra.

PI 641550. Medicago platycarpos (L.) Trautv.
Wild. 98HV-151; W6 21526. Collected 09/1998 in Mongolia. Latitude 50° 7' 23" N. Longitude 101° 36' 18" E. Elevation 1204 m. Eguur Sum, Hovsgol Aimag, 3 km NE of Erdenebulgan. Egiyn River bottom, small open meadows in stands of birch and willow, Carex-grass-forb type, meadow brown soil. Associated vegetation: Galatella dahurica, Artemisia sp., Galium verum, Kobresia sibirica, Carex pediformis, Leymus chinensis, Schizonepeta multifida, Stipa sibirica, Heteropappus biennis.

PI 641551. Medicago platycarpos (L.) Trautv.
Wild. 98HV-164; W6 21539. Collected 09/1998 in Mongolia. Latitude

50° 6' 39" N. Longitude 101° 16' 40" E. Elevation 1372 m. Eguur Sum, Hovsgol Aimag, 30 km west of Erdenebulgan. Sloping mountain meadow just above cut-bank along small streams, alluvial fan, forb-Stipa type, light brown soil. Associated vegetation: Sanguisorba officinalis, Medicago platycarpos, Stipa baicalensis, Echinops latifolia, Thalictrum minus, Geranium pratense, Leymus chinensis, Poa botryoides.

PI 641552. Medicago platycarpos (L.) Trautv.
Wild. 98HV-253; W6 21624. Collected 09/1998 in Mongolia. Latitude 49° 30' 59" N. Longitude 102° 6' 32" E. Elevation 1204 m. Ich Uul Sum, Hovsgol Aimag, 20 km SE of Tarialan. Lower slope above abandoned grain fields and below hayed area, sandy brown soil. Associated vegetation: Stipa grandis, Artemisia frigida, Medicago platycarpos, Artemisia commutata, Bupleurum bicaule, Leymus chinensis, Erigeron acer, Koeleria macrantha, Stipa krylovii, Potentilla verticillaris, Thalictrum squarrosa.

The following were collected by Harold E. Bockelman, USDA, ARS, National Small Grains Collection, 1691 S 2700 W, Aberdeen, Idaho 83210, United States; Richard C. Johnson, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Roman Boguslavsky, National Centre for Plant Genetic Resources of Ukraine, Lab. for Introduction & Storage of Plant Genetic Resources, Yurjev Institute of Plant Production, Kharkiv, Kharkiv 61060, Ukraine; Vladislav Korzhenevsky, State Nikitsky Botanical Gardens, Department of Flora & Vegetation, Yalta, Krym 334267, Ukraine. Received 08/15/1999.

PI 641553. Medicago brachycarpa Fisch. ex M. Bieb.
Wild. UKR-99-012; W6 21708. Collected 07/27/1999 in Krym, Ukraine. Latitude 44° 30' 39" N. Longitude 34° 14' E. Elevation 300 m. Near and around Nikita Botanical. South slope, rocky.

PI 641554. Medicago orbicularis (L.) Bartal.
Wild. UKR-99-013; W6 21709. Collected 07/27/1999 in Krym, Ukraine. Latitude 44° 30' 39" N. Longitude 34° 14' E. Elevation 300 m. Near and around Nikita Botanical. South slope, rocky.

PI 641555. Medicago orbicularis (L.) Bartal.
Wild. UKR-99-031; W6 21721. Collected 07/28/1999 in Krym, Ukraine. Latitude 44° 24' 39" N. Longitude 34° 0' 15" E. Elevation 195 m. Near Simeiz along road A-294. South slope, rocky, dry, highly diverse calcarous.

PI 641556. Medicago praecox DC.
Wild. UKR-99-032; W6 21722. Collected 07/28/1999 in Krym, Ukraine. Latitude 44° 24' 39" N. Longitude 34° 0' 15" E. Elevation 195 m. Near Simeiz along road A-294. South slope, rocky, dry, highly diverse calcarous.

PI 641557. Medicago sativa L. **subsp. sativa**
Wild. UKR-99-047; W6 21731. Collected 07/28/1999 in Krym, Ukraine. Latitude 44° 24' 15" N. Longitude 33° 49' 30" E. Elevation 230 m. Near Black Sea and Sanatome along road A-294. South slope, rocky, dry.

PI 641558. Medicago brachycarpa Fisch. ex M. Bieb.
Wild. UKR-99-122; W6 21782. Collected 07/31/1999 in Krym, Ukraine. Latitude 44° 30' 41" N. Longitude 33° 50' 48" E. Elevation 420 m. In lake valley near Peredove. Along stream, grazed, few plants. Growing with M. minima and M. orbicularis. All collected off the ground.

PI 641559. Medicago minima (L.) Bartal.
Wild. UKR-99-123; W6 21783. Collected 07/31/1999 in Krym, Ukraine. Latitude 44° 30' 41" N. Longitude 33° 50' 48" E. Elevation 420 m. In lake valley near Peredove. South slope, grazed, rocky.

PI 641560. Medicago monspeliaca (L.) Trautv.
Wild. UKR-99-124; W6 21784. Collected 07/31/1999 in Krym, Ukraine. Latitude 44° 30' 41" N. Longitude 33° 50' 48" E. Elevation 420 m. In lake valley near Peredove. South slope, grazed, rocky.

PI 641561. Medicago orbicularis (L.) Bartal.
Wild. UKR-99-125; W6 21785. Collected 07/31/1999 in Krym, Ukraine. Latitude 44° 30' 41" N. Longitude 33° 50' 48" E. Elevation 420 m. In lake valley near Peredove. South slope, grazed, rocky.

PI 641562. Medicago orbicularis (L.) Bartal.
Wild. UKR-99-166; W6 21816. Collected 08/01/1999 in Krym, Ukraine. Latitude 44° 47' 32" N. Longitude 34° 37' 24" E. Elevation 300 m. Near Pryvitne off road A-294. South moderate slope.

PI 641563. Medicago praecox DC.
Wild. UKR-99-014; W6 21895. Collected 08/1999 in Krym, Ukraine. Latitude 44° 30' 39" N. Longitude 34° 14' E. Elevation 300 m. Near and around Nikita Botanical. South slope, rocky. coleccion Pompadour Vieja.

The following were donated by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg.-N, Lexington, Kentucky 40546-0019, United States. Received 1997.

PI 641564. Trifolium pratense L.
Uncertain. S-207-40; W6 22226.

PI 641565. Trifolium stoloniferum Muhl. ex Eaton
Uncertain. S-232-16; W6 22232.

PI 641566. Trifolium stoloniferum Muhl. ex Eaton
Uncertain. S-232-17; W6 22233.

PI 641567. Trifolium medium L.
Uncertain. S-25-91; W6 22236.

PI 641568. Trifolium ambiguum M. Bieb.
Uncertain. S-4-79; W6 22239.

The following were collected by Nikolai I. Dzyubenko, N.I. Vavilov All-Russian Scientific Research, Institute of Plant Genetic Resources, 44 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Blair Waldron, USDA, ARS, Utah State University, Forage and Range

Research Laboratory, Logan, Utah 84322-6300, United States; R. Deane Harrison, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States; Auskhan Khusainov, Aral Sea Experimant Station for Plant Genetic Resources, 27 Biyekenov Street, Chelkar Town, Kazakhstan. Received 04/04/2000.

PI 641569. Medicago sativa subsp. falcata (L.) Arcang.
Wild. Pkg# 50; W6 22400; PARL 49. Collected 10/1999 in Kazakhstan. Latitude 50° 16' N. Longitude 60° 49' E. Elevation 244 m. Soil: silt loam. Ppt = 300 mm. Silty clay loam sub-soil, 15-18" top soil.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Stephanie Greene, USDA, ARS, National Temperate Forage Legume, Germplasm Resources Unit, Prosser, Washington 99350-9687, United States; Nikolai I. Dzyubenko, N.I. Vavilov All-Russian Scientific Research, Institute of Plant Genetic Resources, 44 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Auskhan Khusainov, Aral Sea Experimant Station for Plant Genetic Resources, 27 Biyekenov Street, Chelkar Town, Kazakhstan. Received 08/2000.

PI 641570. Medicago sativa nothosubsp. varia (Martyn) Arcang.
Wild. KAZ-006; W6 22718. Collected 08/26/2000 in Aqtobe, Kazakhstan. Latitude 49° 46' 10" N. Longitude 57° 19' 34" E. Elevation 272 m. "Flower color: VARIGATED-LIGHT BLUE-GREEN, sickle-shaped pods, non-coiled", (Collector Note). Somatic chromosome= 32; MODERATELY DARK PURPLE with 20% yellow-flowered plants; pods sickle shaped, <.5 coil, 1-3 mm wide, some almost full circle (evalion of original pod sample by S.L. Greene, 2001).

PI 641571. Medicago sativa nothosubsp. hemicycla (Grossh.) C. R. Gunn
Wild. KAZ-034; W6 22724. Collected 08/27/2000 in Aqtobe, Kazakhstan. Latitude 49° 13' 3" N. Longitude 57° 39' 7" E. Elevation 248 m. "Flower color: VARIGATED-DARK BLUE,VAR-LIGHT BLUE,VAR-DARK BLUE GREEN. Hybrid between falcata and trautvetter-type" (Collector Note: N. Dzubenko). Distinct populations of M. sativa ssp. falcata and Trautvetter's alfa Somatic chromosome number=16; VARIGATED LIGHT YELLOW GREEN with 10% blue-flowered plants (Prosser, WA., USA regeneration 2001). 5 to 2.5 loose coils to sickle shaped (evaluation of original pod sample by S.L. Greene, 2001).

PI 641572. Medicago lupulina L.
Wild. KAZ-054; W6 22731. Collected 08/28/2000 in Aqtobe, Kazakhstan. Latitude 48° 46' 35" N. Longitude 58° 31' 33" E. Elevation 320 m. "Area has been grazed", (Collector Note). Flowers yellow, seed pods round.

PI 641573. Medicago lupulina L.
Wild. KAZ-069; W6 22736. Collected 08/28/2000 in Aqtobe, Kazakhstan. Latitude 48° 53' 22" N. Longitude 58° 34' 19" E. Elevation 394 m.

PI 641574. Medicago sativa nothosubsp. hemicycla (Grossh.) C. R. Gunn
Wild. KAZ-075A; W6 22738. Collected 08/28/2000 in Aqtobe, Kazakhstan.

Latitude 48° N. Longitude 58° E. Pods sickle shaped, <.5 coil, 1-3 mm wide, some full circle (evaluation of original pod sample by S.L. Greene, 2001).

PI 641575. Medicago sativa subsp. falcata (L.) Arcang.
Wild. KAZ-095; W6 22742. Collected 08/29/2000 in Aqtobe, Kazakhstan. Latitude 49° 9' 55" N. Longitude 58° 41' 8" E. Elevation 403 m.

PI 641576. Medicago sativa nothosubsp. hemicycla (Grossh.) C. R. Gunn
Wild. KAZ-092; W6 22743. Collected 08/29/2000 in Aqtobe, Kazakhstan. Latitude 49° 9' 55" N. Longitude 58° 41' 8" E. Elevation 403 m. "Medicago sativa falcata and hybrid forms dominant at this site. Varia-type also observed, but rare", (Collector Note). Somatic chromosome number=16, all plants VARIGATED LIGHT YELLOW GREEN (Prosser, WA., USA regeneration 2001).5 to 1.5 loose coils to sickle shaped (evaluation of original pod samples by S.L. Greene, 2001).

PI 641577. Medicago sativa subsp. falcata (L.) Arcang.
Wild. KAZ-112; W6 22746. Collected 08/29/2000 in Aqtobe, Kazakhstan. Latitude 49° 14' 13" N. Longitude 58° 34' 58" E. Elevation 330 m. "Sampled 100% of population", (Collector Note) Somatic chromosome number=16, all plants MODERATELY DARK YELLOW (Prosser, WA., USA regeneration 2001) Pods sickle shaped, <.5 coil, 1-3 mm wide (evaluation of original pod samples by S.L. Greene, 2).

PI 641578. Medicago sativa nothosubsp. hemicycla (Grossh.) C. R. Gunn
Wild. KAZ-117; W6 22747. Collected 08/29/2000 in Aqtobe, Kazakhstan. Latitude 49° 14' 13" N. Longitude 58° 34' 58" E. Elevation 330 m. "Sampled 100% of population", (Collector Note) Pods coiled in.5 to 2.5 loose coils, some sickle shaped (Prosser, WA., USA regeneration 2001).

PI 641579. Medicago sativa nothosubsp. hemicycla (Grossh.) C. R. Gunn
Wild. KAZ-135; W6 22755. Collected 08/29/2000 in Aqtobe, Kazakhstan. Latitude 49° 23' 10" N. Longitude 58° 41' 4" E. Elevation 365 m. "Only Medicago taxa seen at this site, very saline soils", (Collector Note). Somatic chromosome number=16, VARIGATED LIGHT YELLOW GREEN (Prosser, WA., USA regeneration 2001).

PI 641580. Medicago sativa subsp. falcata (L.) Arcang.
Wild. KAZ-141; W6 22756. Collected 08/30/2000 in Aqtobe, Kazakhstan. Latitude 49° 23' 10" N. Longitude 58° 41' 4" E. Elevation 365 m.

PI 641581. Medicago sativa subsp. falcata (L.) Arcang.
Wild. KAZ-147; W6 22760. Collected 08/30/2000 in Aqtobe, Kazakhstan. Latitude 49° 26' 24" N. Longitude 58° 37' 14" E. Elevation 356 m. "No [other medicago] plants observed in surrounds. May have been introduced but definately wild-type, not cultivar", (Collector Note). Somatic chromosome number= 16 and 32; all flowers yellow; pods sickle shaped, <.5 coil, 1-3 mm wide, (evaluatiof original pod samples by S.L. Greene, 2001).

PI 641582. Medicago sativa subsp. falcata (L.) Arcang.
Wild. KAZ-158; W6 22762. Collected 08/30/2000 in Aqtobe, Kazakhstan. Latitude 49° 27' 6" N. Longitude 58° 37' 14" E. Elevation 345 m. "Either a hybrid form or large form of M. sativa ssp. falcata", (Collector Note). Somatic chromosome number=32; all plants

yellow-flowered (Prosser, WA., USA regeneration 2001). Pods sickle shaped, <.5 coil, 1-3 mm wide (evaluation of original psamples by S.L. Greene, 2001).

PI 641583. Medicago lupulina L.
Wild. KAZ-153; W6 22763. Collected 08/30/2000 in Aqtobe, Kazakhstan. Latitude 49° 27' 6" N. Longitude 58° 37' 14" E. Elevation 345 m.

PI 641584. Medicago lupulina L.
Wild. KAZ-159; W6 22766. Collected 08/30/2000 in Aqtobe, Kazakhstan. Latitude 49° 30' 7" N. Longitude 58° 27' 44" E. Elevation 377 m. "Trautvetter's alfalfa observed in farm yard as a weed. No other perennial Medicago observed", (Collector Note).

PI 641585. Medicago sativa subsp. falcata (L.) Arcang.
Wild. KAZ-167; W6 22767. Collected 08/30/2000 in Aqtobe, Kazakhstan. Latitude 49° 33' 51" N. Longitude 58° 55' E. Elevation 388 m. Somatic chromosome number=16, Pods sickle shaped, <.5 coil, 1-3 mm wide (evaluation of original pod samples by S.L. Greene, 2001).

PI 641586. Medicago sativa nothosubsp. hemicycla (Grossh.) C. R. Gunn
Wild. KAZ-181; W6 22770. Collected 08/31/2000 in Aqtobe, Kazakhstan. Latitude 49° 31' 27" N. Longitude 59° 4' 23" E. Elevation 385 m. "Possibley a hybrid form, some blue noted on yellow flower buds. Also pods were large and seed set was profuse. This may be a tetraploid. This type generally more mature than other falcata seen at this site" (Collect Somatic chromosome number=16, VARIGATED LIGHT YELLOW GREEN (Prosser, WA., USA regeneration 2001) Pods sickle shaped, <.5 coil, 1-3 mm wide (evaluation of original pod samples by S.L. Greene, 2001).

PI 641587. Medicago sativa subsp. falcata (L.) Arcang.
Wild. KAZ-169; W6 22771. Collected 08/31/2000 in Aqtobe, Kazakhstan. Latitude 49° 23' 44" N. Longitude 59° 4' 12" E. Elevation 392 m. "Only perennial Medicago taxa found at this site. No evidence of Trautvetter's alfalfa or hybrid forms at this site. Small-pod form predominant type," (Collector Note). all plants MODERATELY DARK YELLOW (Prosser, WA., USA regeneration 2001); pods sickle shaped, <.5 coil, 1-3 mm wide (evaluation of original pod samples by S.L. Greene, 2001).

PI 641588. Medicago sativa subsp. falcata (L.) Arcang.
Wild. KAZ-186; W6 22772. Collected 08/31/2000 in Aqtobe, Kazakhstan. Latitude 49° 18' 51" N. Longitude 59° 3' 34" E. Elevation 371 m. "M. sativa ssp. falcata predominate at this site (60 % falcata, 30 % hybrid form, 10% Trautvetter's alfalfa)", (Collector Note). Somatic chromosome number=32, all plants MODERATELY DARK YELLOW (Prosser, WA., USA regeneration 2001) Pods sickle shaped, <.5 coil, 1-3 mm wide, some form complete circle (evaluation of original pod samples by S.L. Greene, 2001).

PI 641589. Medicago sativa subsp. falcata (L.) Arcang.
Wild. KAZ-183; W6 22774. Collected 08/31/2000 in Aqtobe, Kazakhstan. Latitude 49° 18' 51" N. Longitude 59° 3' 34" E. Elevation 371 m. Somatic chromosome number=16, all plants MODERATELY DARK YELLOW (Prosser, WA., USA regeneration 2001).

PI 641590. Medicago sativa nothosubsp. hemicycla (Grossh.) C. R. Gunn
Wild. KAZ-190; W6 22775. Collected 09/01/2000 in Aqtobe, Kazakhstan.

Latitude 49° 10' 48" N. Longitude 59° 3' 45" E. Elevation 317 m. "This site predominately M. sativa subsp. falcata. Did see a few hybrid flower types. No Trautvetter's alfalfa observed", (Collector Note). Somatic chromosome number=16; VARIGATED LIGHT YELLOW GREEN (Prosser, WA., USA regeneration 2001). Pods sickle shaped, <.5 coil, 1-3 mm wide (evaluation of original pod samples by S.L. Greene, 2001).

PI 641591. Medicago sativa nothosubsp. varia (Martyn) Arcang. Wild. KAZ-196; W6 22776. Collected 09/01/2000 in Aqtobe, Kazakhstan. Latitude 49° 10' 48" N. Longitude 59° 3' 45" E. Elevation 317 m. "M. sativa ssp. falcata dominant form, although some hybrids observed; flower color=YELLOW-MOD. LIGHT; some grazing impact observed at this site", (Collector Note). Somatic chromosome number=32; VARIGATED LIGHT YELLOW GREEN (Prosser, WA., USA regeneration 2001) Pods sickle shaped, <.5 coil, 1-3 mm wide (evaluation of original pod samples by S.L. Greene, 2001).

PI 641592. Medicago sativa subsp. falcata (L.) Arcang. Wild. KAZ-197; W6 22777. Collected 09/01/2000 in Aqtobe, Kazakhstan. Latitude 49° 4' 57" N. Longitude 59° 3' 56" E. Elevation 161 m. "M. sativa ssp. falcata predominant Medicago species at site", (Collector Note). Somatic chromosome number=16; all plants MODERATELY DARK YELLOW (Prosser, WA., USA regeneration 2001).

PI 641593. Medicago sativa nothosubsp. hemicycla (Grossh.) C. R. Gunn Wild. KAZ-207; W6 22780. Collected 09/01/2000 in Aqtobe, Kazakhstan. Latitude 48° 50' 36" N. Longitude 59° 1' 50" E. Elevation 337 m. "May be some hybrid-types present", (Collector Note). Somatic chromosome number=16; VARIGATED LIGHT YELLOW GREEN (Prosser, WA., USA regeneration 2001).

PI 641594. Medicago sativa nothosubsp. varia (Martyn) Arcang. Wild. KAZ-206; W6 22781. Collected 09/01/2000 in Aqtobe, Kazakhstan. Latitude 48° 50' 36" N. Longitude 59° 1' 50" E. Elevation 337 m. "White-flowered Medicago hybrid", (Collector Note) Somatic chromosome number=32; VARIGATED LIGHT YELLOW GREEN with 10% blue-flowered plants. Pods sickle shaped, <.5 coil, 1-3 mm wide (evaluation of original pod samples by S.L. Greene, 2001).

PI 641595. Medicago sativa nothosubsp. varia (Martyn) Arcang. Wild. KAZ-216; W6 22783. Collected 09/01/2000 in Aqtobe, Kazakhstan. Latitude 48° 50' 13" N. Longitude 58° 53' 31" E. Elevation 372 m. "Mixture of Medicago types. Undistinquishable because flowers matured", (Collector Note). Somatic chromosome number=32; all plants CREAM (Prosser, WA., USA regeneration 2001). Pods sickle shaped, <.5 coil, 1-3 mm wide (evaluation of original poamples by S.L. Greene, 2001).

PI 641596. Medicago sativa nothosubsp. varia (Martyn) Arcang. Wild. KAZ-244; W6 22790. Collected 09/02/2000 in Aqtobe, Kazakhstan. Latitude 48° 43' 57" N. Longitude 58° 34' 32" E. Elevation 440 m. "Medicago hybrids- yellow, white, purple and variegated flowers, pods large, profuse", (Collector Notes). Somatic chromosome number=32; VARIAGATED DARK PURPLE with 10% blue-flowered plants(Prosser, WA., USA regeneration 2001). Pods sickle shaped,.5 to 1 coil (evaluation of original pod samples by S.L. Greene, 2001).

PI 641597. Medicago sativa nothosubsp. hemicycla (Grossh.) C. R. Gunn
Wild. KAZ-253; W6 22795. Collected 09/02/2000 in Aqtobe, Kazakhstan. Latitude 48° 49' 19" N. Longitude 58° 5' 11" E. Elevation 220 m. "Hybrid types, plants in scattered patches", (Collector Note). Somatic chromosome number=16; VERY LIGHT PURPLE, 10% plants with greenish flowers (Prosser, WA., USA regeneration 2001). Pods sickle shaped, <.5 coil, 1-3 mm wide (evaluation of origl pod samples by S.L. Greene, 2001).

PI 641598. Medicago lupulina L.
Wild. KAZ-260; W6 22799. Collected 09/02/2000 in Aqtobe, Kazakhstan. Latitude 48° 38' 38" N. Longitude 57° 55' 21" E. Elevation 197 m. No perennial Medicago species observed at this site.

PI 641599. Medicago sativa subsp. falcata (L.) Arcang.
Wild. KAZ-281; W6 22809. Collected 09/03/2000 in Aqtobe, Kazakhstan. Latitude 48° 34' 19" N. Longitude 57° 19' 6" E. Elevation 230 m. Pods sickle shaped, <.5 coil, 1-3 mm wide (evaluation of original pod samples by S.L. Greene, 2001).

PI 641600. Medicago sativa nothosubsp. hemicycla (Grossh.) C. R. Gunn
Wild. KAZ-278; W6 22811. Collected 09/03/2000 in Aqtobe, Kazakhstan. Latitude 48° 34' 19" N. Longitude 57° 19' 6" E. Elevation 230 m. "Five out of 5 plants sampled.Found along roadside", (Collector Note). Somatic chromosome number=16; VARIGATED.LIGHT YELLOW GREEN (Prosser, WA., USA regeneration 2001). Pods sickle shaped, <.5 coil, 1-3 mm wide, pod length shorter then average (luation of original pod samples by S.L. Greene, 2001).

PI 641601. Medicago sativa subsp. caerulea (Less. ex Ledeb.) Schmalh.
Wild. KAZ-284; W6 22815. Collected 09/03/2000 in Aqtobe, Kazakhstan. Latitude 48° 40' 46" N. Longitude 57° 4' 24" E. Elevation 211 m. "Only this type seen. Six out of 6 plants sampled,"(Collector Note). Somatic chromosome number=16; all plants DARK PURPLE (Prosser, WA., USA regeneration 2001) Pods in.5 to 2.5 loose coils, above ave. pod pubescence (evaluation of original pod samples by S.L. Greene, 2001).

PI 641602. Medicago sativa nothosubsp. hemicycla (Grossh.) C. R. Gunn
Wild. KAZ-299; W6 22820. Collected 09/04/2000 in Aqtobe, Kazakhstan. Latitude 48° 43' 23" N. Longitude 57° 5' 55" E. Elevation 193 m. "Hybrid type. Single plant sampled from one observed. Flowers green/purple/yellow", (Collector Note). Somatic chromosome number=16; VARIGATED LIGHT YELLOW GREEN with 20 % blue-flowered plants (Prosser, WA., USA regeneration 2001). Pods sickle shaped, <.5 coil, 1-3 mm wide (evaluation of original pod samples by S.L. Greene, 2001).

PI 641603. Medicago sativa subsp. caerulea (Less. ex Ledeb.) Schmalh.
Wild. KAZ-305; W6 22822. Collected 09/04/2000 in Aqtobe, Kazakhstan. Latitude 48° 56' 31" N. Longitude 57° 6' 45" E. Elevation 256 m. "Patches of M. sativa ssp. caerulea separate from patches of M. sativa ssp. falcata. No evidence of hybrids at this site," (Collector Note). Pods coiled in.5 to 2.5 loose coils (evaluation of original pod samples by S.L. Greene, 2001).

PI 641604. Trifolium pratense L.
Wild. KAZ-313; W6 22826. Collected 09/05/2000 in Aqtobe, Kazakhstan. Latitude 49° 14' 14" N. Longitude 56° 30' 40" E. Elevation 164 m.

PI 641605. Medicago sativa nothosubsp. varia (Martyn) Arcang.
Wild. KAZ-322; W6 22829. Collected 09/05/2000 in Aqtobe, Kazakhstan. Latitude 49° 35' 13" N. Longitude 56° 31' 5" E. Elevation 280 m. "Was predominate Medicago type at this site",(Collector Note). Somatic chromosome number=32; MODERATELY DARK PURPLE with 10% plants blue, yellow, or green flower (Prosser, WA., USA regeneration 2001) Pods coiled in.5 to 2.5 loose coils, and sickle shaped (evaluation of original pod samples by S.L. Greene, 2001).

PI 641606. Medicago sativa subsp. caerulea (Less. ex Ledeb.) Schmalh.
Wild. KAZ-324; W6 22830. Collected 09/05/2000 in Aqtobe, Kazakhstan. Latitude 49° 35' 13" N. Longitude 56° 31' 5" E. Elevation 280 m. Somatic chromosome number=16, all plants DARK PURPLE (Prosser, WA., USA regeneration 2001).

PI 641607. Medicago lupulina L.
Wild. KAZ-335; W6 22833. Collected 09/06/2000 in Aqtobe, Kazakhstan. Latitude 49° 49' 28" N. Longitude 56° 53' 27" E. Elevation 271 m.

PI 641608. Trifolium pratense L.
Wild. KAZ-332; W6 22834. Collected 09/06/2000 in Aqtobe, Kazakhstan. Latitude 49° 49' 28" N. Longitude 56° 53' 27" E. Elevation 271 m.

PI 641609. Medicago sativa nothosubsp. hemicycla (Grossh.) C. R. Gunn
Wild. KAZ-341; W6 22839. Collected 09/06/2000 in Aqtobe, Kazakhstan. Latitude 50° 9' 3" N. Longitude 56° 58' 35" E. Elevation 332 m. "Medicago hybrid with green-purple flowers" (Collector Notes). Somatic chromosome number=16; VARIGATED LIGHT YELLOW GREEN with 10% blue-flowered plants (Prosser, WA., USA regeneration 2001). Pods sickle shaped, <.5 coil, 1-3 mm wide (evaluation original pod samples by S.L. Greene, 2001).

PI 641610. Medicago sativa nothosubsp. varia (Martyn) Arcang.
Wild. KAZ-342; W6 22840. Collected 09/06/2000 in Aqtobe, Kazakhstan. Latitude 50° 9' 3" N. Longitude 56° 58' 35" E. Elevation 332 m. Site consisted of 50% M. nothosubsp. varia (or M. sativa ssp. caerulea), 40% M. sativa ssp. falcata and 10% obvious hybrid populations (Collector Notes) All plants MODERATELY DARK PURPLE (Prosser, WA., USA regeneration 2001) Pods coiled in.5 to 2.5 loose coils (evaluation of original pod samples by S.L. Greene, 2001).

PI 641611. Trifolium pratense L.
Wild. KAZ-346; W6 22845. Collected 09/08/2000 in Aqtobe, Kazakhstan. Latitude 50° 34' 38" N. Longitude 56° 48' 1" E. Elevation 200 m.

PI 641612. Medicago sativa nothosubsp. hemicycla (Grossh.) C. R. Gunn
Wild. KAZ-355; W6 22848. Collected 09/08/2000 in Aqtobe, Kazakhstan. Latitude 50° 39' 59" N. Longitude 56° 28' 53" E. Elevation 211 m. "M. sativa ssp. falcata [W6 22847, 2n=16] dominant Medicago at this site. Pods variable- coiled to falcata-like. May be populations at different ploidy levels at this site. Flower color: PURPLE-MODERATELY DARK" (Collector Notes) Somatic chromosome number= 16.; Flower color during 2001 regeneration at Prosser, WA: MODERATELY DARK YELLOW, with 15% blue-flowered plants. 5 to 2.5 loose coils to sickle shaped (evaluation of original pod samples by S.L. Greene, 2001).

PI 641613. Medicago sativa subsp. falcata (L.) Arcang.
Wild. KAZ-356; W6 22849. Collected 09/09/2000 in Aqtobe, Kazakhstan. Latitude 50° 34' 32" N. Longitude 56° 21' 27" E. Elevation 186 m. Pods sickle shaped, <.5 coil, 1-3 mm wide (evaluation of original pod samples by S.L. Greene, 2001).

PI 641614. Medicago sativa nothosubsp. varia (Martyn) Arcang.
Wild. KAZ-359; W6 22850. Collected 09/09/2000 in Aqtobe, Kazakhstan. Latitude 50° 34' 32" N. Longitude 56° 21' 27" E. Elevation 186 m. "This accession is a white-flowered hybrid type. Only two plants of this type seen at this site."(Collector Notes) Pods sickle shaped, <.5 coil, 1-3 mm wide (evaluation of original pod samples by S.L. Greene, 2001).

PI 641615. Medicago sativa nothosubsp. hemicycla (Grossh.) C. R. Gunn
Wild. KAZ-358; W6 22852. Collected 09/09/2000 in Aqtobe, Kazakhstan. Latitude 50° 34' 32" N. Longitude 56° 21' 27" E. Elevation 186 m. M. sativa ssp. falcata (W6 22849) was dominate at this site (Collector Note). Somatic chromosome number=16. Coiled in.5 to 2.5 loose coils and sickle shaped (evaluation of original pod samples by S.L. Greene, 2001).

PI 641616. Medicago sativa nothosubsp. hemicycla (Grossh.) C. R. Gunn
Wild. KAZ-382; W6 22857. Collected 09/09/2000 in Aqtobe, Kazakhstan. Latitude 50° 17' 56" N. Longitude 55° 49' 48" E. Elevation 191 m. Somatic chromosome number=16;ORANGE YELLOW with 20% blue-flowered plants (Prosser, WA., USA regeneration 2001). 5 to 2.5 loose coils to sickle shaped (evaluation of original pod samples by S.L. Greene, 2001).

PI 641617. Trifolium montanum L.
Wild. KAZ-380; W6 22858. Collected 09/09/2000 in Aqtobe, Kazakhstan. Latitude 50° 17' 56" N. Longitude 55° 49' 48" E. Elevation 191 m.

PI 641618. Trifolium pratense L.
Wild. KAZ-379; W6 22859. Collected 09/09/2000 in Aqtobe, Kazakhstan. Latitude 50° 17' 56" N. Longitude 55° 49' 48" E. Elevation 191 m.

PI 641619. Medicago sativa nothosubsp. hemicycla (Grossh.) C. R. Gunn
Wild. KAZ-377; W6 22860. Collected 09/10/2000 in Aqtobe, Kazakhstan. Latitude 50° 17' 56" N. Longitude 55° 49' 48" E. Elevation 191 m. This Medicago species was dominant at this site (Collector Note). Chromosome number 2n=16; Flower color during 2001 regeneration at Prosser, WA: all plants DARK PURPLE Coiled in.5 to 2.5 loose coils and sickle shaped (evaluation of original pod samples by S.L. Greene, 2001).

PI 641620. Medicago sativa subsp. falcata (L.) Arcang.
Wild. KAZ-400; W6 22867. Collected 09/10/2000 in Aqtobe, Kazakhstan. Latitude 50° 9' 48" N. Longitude 55° 51' 24" E. Elevation 171 m. "Medicago mixture of M. falcata and M. varia", (Collector Note) Chromosome number 2n=16, all plants MODERATELY DARK YELLOW (Prosser, WA., USA regeneration 2001) Pods sickle shaped, <.5 coil, 1-3 mm wide (evaluation of original pod samples by S.Lreene, 2001).

PI 641621. Trifolium pratense L.
Wild. KAZ-408; W6 22869. Collected 09/10/2000 in Aqtobe, Kazakhstan. Latitude 50° 17' 55" N. Longitude 56° 5' 20" E. Elevation 270 m.

PI 641622. Medicago lupulina L.
Wild. KAZ-417; W6 22873. Collected 09/11/2000 in Aqtobe, Kazakhstan. Latitude 50° 12' 28" N. Longitude 56° 28' 18" E. Elevation 217 m. "Area rich with Medicago lupulina, Trifolium repens, T. fragiferum, T. pratense. Grasses included Stipa and Elymus. Some blue and yellow forms of perennial Medicago, but rare and grazed. M. lupulina was good seed produc.

PI 641623. Medicago lupulina L.
Wild. KAZ-437; W6 22876. Collected 06/01/2000 in Krasnodar, Russian Federation.

The following were donated by Richard R. Smith, USDA, ARS, U.S. Dairy Forage Research Center, University of Wisconsin, Madison, Wisconsin 53706, United States. Received 07/25/1997.

PI 641624. Trifolium medium L.
Wild. Wisc Acc: Act 528; Yugo# 1611242223; W6 23359. Collected 1990 in Former Serbia and Montenegro. Latitude 44° 45' N. Longitude 15° 16' E. Collected near Otocaa in a. sloped area, loam soil, good drainage.

PI 641625. Trifolium velebiticum Degen
Wild. Wisc Acc: Act 534; Yugo# 2011241223; W6 23365. Collected 1990 in Former Serbia and Montenegro. Latitude 44° 45' N. Longitude 15° 16' E. Collected near Krbavsko Polje. level area, loam soil, good drainage.

PI 641626. Trifolium medium L.
Wild. Wisc Acc: Act 535; Yugo# 101262223; W6 23366. Collected 1990 in Former Serbia and Montenegro. Latitude 44° 45' N. Longitude 15° 16' E. Collected near Perusic. sloped area, loam soil, good drainage.

The following were donated by J. Valkoun, Int. Center for Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria. Received 02/10/2002.

PI 641627. Medicago minima (L.) Bartal.
Wild. IG 52764; 122; W6 23689. Collected 02/10/2002 in Turkmenistan. province.

PI 641628. Medicago rigidula (L.) All.
Wild. IG 52966; 324; W6 23690. Collected 02/10/2002 in Turkmenistan. Ashkhabad province.

PI 641629. Medicago minima (L.) Bartal.
Wild. IG 58113; 5471; W6 23691. Collected 02/10/2002 in Tajikistan. Latitude 39° 28' N. Longitude 67° 50' E. Elevation 1070 m. province.

PI 641630. Medicago orbicularis (L.) Bartal.
Wild. IG 126394; 7988; W6 23692. Collected 02/10/2002 in Turkmenistan. Latitude 38° 29' 10" N. Longitude 56° 42' 9" E. Elevation 1120 m. Ashkhabad province.

PI 641631. Medicago orbicularis (L.) Bartal.
Wild. IG 126412; 7989; W6 23693. Collected 02/10/2002 in Turkmenistan. Latitude 38° 25' 20" N. Longitude 56° 35' 31" E. Elevation 580 m. Krasnovodsk province.

PI 641632. Medicago rigidula (L.) All.
Wild. IG 126464; 7984; W6 23694. Collected 02/10/2002 in Turkmenistan. Latitude 38° 29' 35" N. Longitude 56° 23' 1" E. Elevation 690 m. Krasnovodsk province.

PI 641633. Medicago lupulina L.
Wild. IG 127010; 7987; W6 23697. Collected 02/10/2002 in Armenia. Latitude 39° 2' 2" N. Longitude 46° 12' 12" E. Elevation 490 m. Sjunik province.

PI 641634. Medicago lupulina L.
Wild. IG 131346; 7990; W6 23698. Collected 02/10/2002 in Kazakhstan. Latitude 42° 41' 6" N. Longitude 70° 49' 11" E. Elevation 1050 m. Dzambull province.

PI 641635. Medicago lupulina L.
Wild. IG 131370; 7991; W6 23699. Collected 02/10/2002 in Kazakhstan. Latitude 42° 54' 56" N. Longitude 73° 9' 56" E. Elevation 672 m. Dzambull province.

PI 641636. Medicago lupulina L.
Wild. IG 131407; 7992; W6 23700. Collected 02/10/2002 in Alma-Ata, Kazakhstan. Latitude 43° 13' 22" N. Longitude 76° 34' 49" E. Elevation 840 m. Alma-Ata province.

PI 641637. Medicago lupulina L.
Wild. IG 131412; 7993; W6 23701. Collected 02/10/2002 in Alma-Ata, Kazakhstan. Latitude 43° 9' 10" N. Longitude 77° 3' 47" E. Elevation 1760 m. Alma-Ata province.

PI 641638. Medicago lupulina L.
Wild. IG 131476; 7995; W6 23703. Collected 02/10/2002 in Alma-Ata, Kazakhstan. Latitude 43° 9' 34" N. Longitude 75° 56' 54" E. Elevation 1030 m. Alma-Ata province.

PI 641639. Medicago lupulina L.
Wild. IG 131516; 7996; W6 23704. Collected 02/10/2002 in Kyrgyzstan. Latitude 42° 17' 17" N. Longitude 77° 48' 47" E. Elevation 1641 m. Issyk-Kul province.

PI 641640. Medicago lupulina L.
Wild. IG 131532; 7998; W6 23706. Collected 02/10/2002 in Kyrgyzstan. Latitude 42° 30' 16" N. Longitude 78° 30' 28" E. Elevation 1750 m. Issyk-Kul province.

PI 641641. Medicago lupulina L.
Wild. IG 131543; 7999; W6 23707. Collected 02/10/2002 in Kyrgyzstan. Latitude 42° 44' 44" N. Longitude 78° 4' 46" E. Elevation 1550 m. Issyk-Kul province.

PI 641642. Medicago lupulina L.
Wild. IG 131548; 8000; W6 23708. Collected 02/10/2002 in Kyrgyzstan. Latitude 42° 38' 24" N. Longitude 77° 3' 13" E. Elevation 1500 m. Issyk-Kul province.

PI 641643. Medicago lupulina L.
Wild. IG 131566; 8002; W6 23710. Collected 02/10/2002 in Kyrgyzstan.

Latitude 42° 17' 45" N. Longitude 75° 52' 26" E. Elevation 1700 m. Issyk-Kul province.

PI 641644. Medicago lupulina L.
Wild. IG 131567; 8003; W6 23711. Collected 02/10/2002 in Kyrgyzstan. Latitude 42° 15' 34" N. Longitude 75° 50' 44" E. Elevation 1700 m. Issyk-Kul province.

PI 641645. Medicago lupulina L.
Wild. IG 131585; 8004; W6 23712. Collected 02/10/2002 in Kyrgyzstan. Latitude 41° 59' 28" N. Longitude 74° 38' 21" E. Elevation 1750 m. Issyk-Kul province.

PI 641646. Medicago lupulina L.
Wild. IG 131601; 8006; W6 23714. Collected 02/10/2002 in Talas, Kyrgyzstan. Latitude 42° 29' 42" N. Longitude 72° 26' 10" E. Elevation 1500 m. Talas province.

PI 641647. Medicago sativa L. **subsp. sativa**
Wild. IG 131331; 5968; W6 23715. Collected 02/10/2002 in Kazakhstan. Latitude 42° 32' 29" N. Longitude 70° 1' 59" E. Elevation 750 m. Chimkent province.

PI 641648. Medicago sativa L. **subsp. sativa**
Wild. IG 131364; 5981; W6 23718. Collected 02/10/2002 in Kazakhstan. Elevation 665 m. Dzambull province.

PI 641649. Medicago sativa L. **subsp. sativa**
Wild. IG 131365; 5982; W6 23719. Collected 02/10/2002 in Kazakhstan. Latitude 42° 58' 51" N. Longitude 72° 21' 23" E. Elevation 820 m. Dzambull province.

PI 641650. Medicago sativa L. **subsp. sativa**
Wild. IG 131376; 5984; W6 23721. Collected 02/10/2002 in Kazakhstan. Latitude 43° 3' 52" N. Longitude 73° 39' 25" E. Elevation 613 m. Dzambull province.

PI 641651. Medicago sativa L. **subsp. sativa**
Wild. IG 131385; 5986; W6 23722. Collected 02/10/2002 in Kazakhstan. Latitude 43° 14' 36" N. Longitude 74° 19' 28" E. Elevation 525 m. Dzambull province.

PI 641652. Medicago sativa L. **subsp. sativa**
Wild. IG 131451; 5996; W6 23723. Collected 02/10/2002 in Alma-Ata, Kazakhstan. Latitude 43° 30' 55" N. Longitude 77° 35' 32" E. Elevation 650 m. Alma-Ata province.

PI 641653. Medicago sativa L. **subsp. sativa**
Wild. IG 131462; 5999; W6 23725. Collected 02/10/2002 in Alma-Ata, Kazakhstan. Latitude 43° 45' 23" N. Longitude 77° 1' 38" E. Elevation 1000 m. Alma-Ata province.

PI 641654. Medicago sativa L. **subsp. sativa**
Wild. IG 131478; 6007; W6 23728. Collected 02/10/2002 in Alma-Ata, Kazakhstan. Latitude 43° 9' 34" N. Longitude 75° 56' 54" E. Elevation 1030 m. Alma-Ata province.

PI 641655. Medicago sativa L. **subsp. sativa**
Wild. IG 131487; 6012; W6 23729. Collected 02/10/2002 in Alma-Ata, Kazakhstan. Latitude 43° 11' 58" N. Longitude 75° 47' 23" E. Elevation 1125 m. Alma-Ata province.

PI 641656. Medicago sativa L. **subsp. sativa**
Wild. IG 131499; 6016; W6 23731. Collected 02/10/2002 in Kyrgyzstan. Latitude 35° 48' 59" N. Longitude 75° 35' 11" E. Elevation 1040 m. Issyk-Kul province.

PI 641657. Medicago sativa L. **subsp. sativa**
Wild. IG 131609; 6052; W6 23740. Collected 02/10/2002 in Talas, Kyrgyzstan. Latitude 42° 36' 44" N. Longitude 71° 29' 25" E. Elevation 1100 m. Talas province.

PI 641658. Medicago sativa L. **subsp. sativa**
Wild. IG 131613; 6053; W6 23741. Collected 02/10/2002 in Talas, Kyrgyzstan. Latitude 42° 43' 48" N. Longitude 71° 25' 2" E. Elevation 850 m. Talas province.

PI 641659. Medicago sativa L. **subsp. sativa**
Wild. IG 131617; 6054; W6 23742. Collected 02/10/2002 in Kazakhstan. Latitude 42° 45' 54" N. Longitude 70° 59' 47" E. Elevation 850 m. Chimkent province.

PI 641660. Medicago sativa L. **subsp. sativa**
Wild. IG 131625; 6057; W6 23744. Collected 02/10/2002 in Kazakhstan. Latitude 42° 35' 2" N. Longitude 69° 16' 8" E. Elevation 400 m. Chimkent province.

PI 641661. Medicago sativa L. **subsp. sativa**
Wild. IG 131632; 6059; W6 23745. Collected 02/10/2002 in Kazakhstan. Latitude 42° 18' 44" N. Longitude 68° 28' 29" E. Elevation 500 m. Chimkent province.

PI 641662. Medicago sativa L. **subsp. sativa**
Wild. IG 131637; 6060; W6 23746. Collected 02/10/2002 in Kazakhstan. Latitude 42° 50' 1" N. Longitude 45° 18' E. Elevation 500 m. Chimkent province.

PI 641663. Trifolium ambiguum M. Bieb.
Wild. IG 131348; 4798; W6 23750. Collected 02/10/2002 in Kazakhstan. Latitude 42° 41' 6" N. Longitude 70° 49' 11" E. Elevation 1050 m. Dzambull province.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, U.S. Peace Corps, Cuerpo de Paz, Casilla #749, Sucre, Chuquisaca, Bolivia; Isabella Arevshatyan, Yerevan, Armenia; Eleonora Gabrielian, Department of Plant Systemics, Geography National Academie of Sciences, Institute of Botany, Yerevan, Armenia; Samvel M. Gasparian, Scientific Research Center of Viticulture, Fruit Growing and Wine Making, Merdzavan, Armenia; Vrez Manakyan, Armenia Academie of Science, Institute of Botany, Yerevan, Armenia; Ashot A. Charchoglian, National Academie of Sciences, Institute of Botany, Yerevan, Armenia. Received 06/24/2002.

PI 641664. Medicago lupulina L.
Wild. ARM 034; W6 23820. Collected 08/09/2001 in Armenia. Latitude 40° 5' 40" N. Longitude 44° 46' 22" E. Elevation 1331 m. At bottom of steep canyon in Khosrov Reserve.

PI 641665. Medicago sativa L. **subsp. sativa**
Wild. ARM 038; W6 23823. Collected 08/09/2001 in Armenia. Latitude 40° 5' 40" N. Longitude 44° 46' 22" E. Elevation 1331 m. At bottom of steep canyon in Khosrov Reserve.

PI 641666. Medicago lupulina L.
Wild. ARM 053; W6 23833. Collected 08/09/2001 in Armenia. Latitude 40° 5' 22" N. Longitude 44° 46' 59" E. Elevation 1364 m. Riparian community, but gets to semi-arid desert when around 25 m above creek bottom. Then it is very steep, rocky and dry.

PI 641667. Medicago sativa L. **subsp. sativa**
Wild. ARM 059; W6 23838. Collected 08/09/2001 in Armenia. Latitude 40° 4' 4" N. Longitude 44° 50' 4" E. Elevation 1381 m. Steep canyon, runs N-S. RMH on west side. WJK on east side collecting. Species include Plantago major, Aegilops, Berberis, Prunus, Pyrus, Sorbus graeca, Sorbus persica (large simple leaf type w/ orange fruit) Dactylis glomerata.

PI 641668. Medicago minima (L.) Bartal.
Wild. ARM 162; W6 23898. Collected 08/11/2001 in Armenia. Latitude 40° 10' 6" N. Longitude 44° 36' 44" E. Elevation 1391 m. In the Erebuni Reserve near Yerevan. Wild Beta macrorhizza is reported in this location, but none was found.

PI 641669. Medicago sativa L. **subsp. sativa**
Wild. ARM 207; W6 23928. Collected 08/13/2001 in Armenia. Latitude 39° 41' 5" N. Longitude 45° 13' 57" E. Elevation 1517 m. Site is 8km off of the main highway20, 30km SE of Yeghegnadzor. Near the new church of Noravanq. Collection made 120 meters up the hillside of a very deep canyon, both sides of the canyon. At 10 meters above the steambed, the terrian was very rocky, steep, extremely dry.

PI 641670. Medicago sativa L. **subsp. sativa**
Wild. ARM 268; W6 23955. Collected 08/14/2001 in Armenia. Latitude 39° 40' 25" N. Longitude 45° 18' 22" E. Elevation 2178 m. At the top of the gorge where it opens to a wider canyon. And this is the open plateau at the top of the canyon.

PI 641671. Medicago sativa L. **subsp. sativa**
Wild. ARM 286; W6 23968. Collected 08/14/2001 in Armenia. Latitude 39° 39' 6" N. Longitude 45° 17' 52" E. Elevation 2002 m. Last site of the day. This was a pasture site near a spring with drinkable water, that looked heavily disturbed, but above the pastured area it was very dry and moderately steep and we found some new species of clover and some thyme, as well as numerous other legumes. Temps well over 105 degrees F.

PI 641672. Medicago sativa L. **subsp. sativa**
Wild. ARM 290; W6 23971. Collected 08/15/2001 in Armenia. Latitude 39° 41' 24" N. Longitude 45° 28' 14" E. Elevation 1303 m. In distrurbed area next to the road in the town of Vayk.

PI 641673. Medicago minima (L.) Bartal.
Wild. ARM 305; W6 23979. Collected 08/15/2001 in Armenia. Latitude 39° 41' 30" N. Longitude 45° 31' 24" E. Elevation 1346 m. About 20km east of Vayk on the road to Saravan, turning north up the Her-her River canyon. Stopped juat 1-2km up the river from the main road. Very steep canyon. Along the river there was moisture, but the terrrain turned desert only 10 m from the river. There water flowing in the river at this time. Site contained Lens orientalis, Lathyrus, and Vicia.

PI 641674. Trifolium ambiguum M. Bieb.
Wild. ARM 318; W6 23988. Collected 08/15/2001 in Armenia. Latitude 39° 47' 43" N. Longitude 45° 28' 49" E. Elevation 2557 m. On the rim, and inside of an old volcano. Very dry, steep rocky area. Observed Cicer anatolicum growing in basaltic rocky area, but the pods were all dehisced.

PI 641675. Medicago minima (L.) Bartal.
Wild. ARM 345; W6 24005. Collected 08/16/2001 in Armenia. Latitude 39° 42' 3" N. Longitude 45° 33' 33" E. Elevation 1360 m. Went back west toward Vaik and then up river canyon toward Jermuk for 2 km. Stopped along river, but collected the very steep, rocky hillside on the north side of the river. Observed Pisum sativum ssp. elatius, Lens orientalis, Vicia ervilia.

PI 641676. Medicago minima (L.) Bartal.
Wild. ARM 395; W6 24037. Collected 07/18/2001 in Armenia.

PI 641677. Medicago sativa L. **subsp. sativa**
Wild. ARM 425; W6 24059. Collected 08/20/2001 in Armenia. Latitude 40° 34' 55" N. Longitude 44° 59' 6" E. Elevation 1935 m. About 50 m from south shore of Lake Sevan. Up a gentle slope to a very steep incline.

PI 641678. Medicago sativa L. **subsp. sativa**
Wild. ARM 439; W6 24067. Collected 08/21/2001 in Armenia. Latitude 40° 37' 55" N. Longitude 44° 59' 11" E. Elevation 1924 m. Camp site on the north shore of Lake Sevan. Also used this reading for collections made across the RR tracks and up a steep canyon just north of the campsite.

PI 641679. Medicago sativa L. **subsp. sativa**
Wild. ARM 442; W6 24070. Collected 08/20/2001 in Armenia. Latitude 40° 37' 55" N. Longitude 44° 59' 11" E. Elevation 1924 m. Camp site on the north shore of Lake Sevan. Also used this reading for collections made across the RR tracks and up a steep canyon just north of the campsite.

PI 641680. Medicago sativa L. **subsp. sativa**
Wild. ARM 497; W6 24109. Collected 08/21/2001 in Armenia. Latitude 40° 27' 15" N. Longitude 45° 25' 21" E. Elevation 1939 m. About 45 km east from site 43. Very dry, heavily grazed, rocky area. Found wild beet and thyme.

PI 641681. Medicago sativa L. **subsp. sativa**
Wild. ARM 518; W6 24117. Collected 08/21/2001 in Armenia. Latitude 40° 27' 34" N. Longitude 45° 18' 53" E. Elevation 1929 m. Second site in the Artanish Reserve.

PI 641682. Medicago minima (L.) Bartal.
Wild. ARM 519; W6 24118. Collected 08/21/2001 in Armenia. Latitude 40° 27' 34" N. Longitude 45° 18' 53" E. Elevation 1929 m. Second site in the Artanish Reserve.

The following were collected by James Adams, U.S. National Arboretum, USDA, ARS, 3501 New York Avenue, N.E., Washington, District of Columbia 20002, United States; Alan Whittemore, U.S. National Arboretum, USDA, ARS, 3501 New York Avenue, NE, Washington, District of Columbia 20002-1958, United States. Received 09/01/2001.

PI 641683. Actinidia kolomikta (Maxim. & Rupr.) Maxim.
VV086; NA 71284; A. kolomikta VV086. Collected in Primorye, Russian Federation. Latitude 43° 7' 18" N. Longitude 132° 47' 42" E. Elevation 450 m. Shkotovsk district, Birch creek up Livadiskaya (=Hualaza) moutain, north of Anisimovka (=Kanguaz). Sunny talus slopes, surrounded by Acer-Abies woods on steep rocky mountainside. Collected 09/01/2001 in Russian Federation. Latitude 43° 7' 18" N. Longitude 132° 47' 42" E. Elevation 450 m. Shkotovsk district, Birch creek up Livadiskaya (=Hualaza) moutain, north of Anisimovka (=Kanguaz). Sunny talus slopes, surrounded by Acer-Abies woods on steep rocky mountainside. Collected 09/07/2001 in Primorye, Russian Federation. Latitude 43° 7' 18" N. Longitude 132° 47' 42" E. Elevation 450 m. Shkotovsk district, Birch creek up Livadiskaya (=Hualaza) mountain, north of Anisimovka (=Kanguaz). Sunny talus slopes, surrounded by Acer-Abies woods on steep rocky mountainside. Pedigree - Collected from the wild in Primorye, Russian Federation. Liana, fruit green and hard when collected.

The following were donated by Karl Hammer, Inst. fur Pflanzengenetik und Kulturpflanzenforschung, (IPK), Genebank, Gatersleben, Saxony-Anhalt D-06466, Germany. Received 06/10/1993.

PI 641684. Calendula stellata Cav.
Wild. CAL 55/89; CAL 55/95; Ames 21130. Collected in Meknes, Morocco. Latitude 33° 57' N. Longitude 5° 30' E. On the road to Fez. Received as C. stellata var. longirostris.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 06/18/1993.

PI 641685. Glaucium flavum Crantz
Wild. 210589-04; Ames 21183; W6 713. Collected 05/21/1989 in Izmir, Turkey. Latitude 38° 11' 56" N. Longitude 26° 50' 27" E. Elevation 5 m. Near seashore, near Seferihisar and the ancient Greek ruins of Teos. Plants 13-18 cm tall. Flowers orange. Pods long, narrow.

The following were collected by Henri Besancon, Jardin Botanique de Bordeaux, Terrasse du Jardin Public, Place Bardineau, Bordeaux, Gironde 33000, France. Donated by Jardin Botanique, Terrasse du Jardin Public, Place Bardineau, Bordeaux, Gironde 33000, France. Received 05/01/2000.

PI 641686. Glebionis coronaria (L.) Cass. ex Spach
Wild. Index Seminum 172; Ames 26046. Collected 04/1997 in Sevilla, Spain. Latitude 37° 15' 53" N. Longitude 6° 30' 59" W. Almonte, between Aznalcazar and Bollullos. Sand-clay-limestone soil.

The following were donated by Philipp W. Simon, USDA, ARS, Vegetable Crops Research Unit, University of Wisconsin, Department of Horticulture, Madison, Wisconsin 53706, United States; Chinese Academy of Agriculture, Institute of Vegetable Research, Beijing, Beijing, China. Received 02/26/2002.

PI 641687. Glebionis coronaria (L.) Cass. ex Spach
Uncertain. Ames 26692.

The following were donated by Jardim Botanico da Universidade de Coimbra, Arcos do Jardim, Coimbra, Coimbra 3000-393, Portugal. Received 07/10/2002.

PI 641688. Glebionis coronaria (L.) Cass. ex Spach
Wild. Index Seminum 362; Ames 26856. Collected 06/13/2000 in Coimbra, Portugal. Latitude 40° 12' N. Longitude 8° 25' W. Coimbra, Beira Litoral Province.

The following were collected by Armando De Jesus Machado, Universidade do Porto, Instituto de Botanica, Rua do Campo Alegre, 1191, Porto, Porto 4100, Portugal; Jose Loureiro Martins, Universidade do Porto, Instituto de Botanica, Rua do Campo Alegre, 1191, Porto, Porto 4100, Portugal. Donated by Universidade do Porto, Instituto de Botanica, Rua do Campo Alegre, 1191, Porto, Porto 4100, Portugal. Received 06/30/1999.

PI 641689. Glebionis segetum (L.) Fourr.
Wild. Index Seminum 31; Ames 25383. Collected 07/06/1998 in Porto, Portugal. Latitude 41° 9' N. Longitude 8° 38' W. Between Lordelo do Ouro and Porto, Douro Litoral Province.

The following were donated by The Plant Cell Research Institute, Inc., 6560 Trinity Court, Dublin, California 94568, United States; Botanischer Garten Marburg, Philipps-Universitat, Auf den Lahnbergen, Marburg, Germany. Received 03/18/1991.

PI 641690. Hyoscyamus albus L.
Uncertain. Index Seminum 1014; Ames 15662; HO-59. Collected in Germany.

The following were donated by The Plant Cell Research Institute, Inc., 6560 Trinity Court, Dublin, California 94568, United States; Hortus Botanicus, University of Nijmegen, Toerneoiveld, Nijmegen, Gelderland 6525 ED, Netherlands. Received 03/18/1991.

PI 641691. Hyoscyamus niger L.
Uncertain. Ames 15663; 996; HO-64. Collected in Netherlands.

The following were collected by Paul Meyer, The University of Pennsylvania, Morris Arboretum, 9414 Meadowlark Avenue, Philadelphia, Pennsylvania 19118, United States; William Thomas, Longwood Gardens, P.O. Box 501, Kennett Square, Pennsylvania 19348, United States; Kevin Conrad, U.S. National Arboretum, USDA, ARS, 3501 New York Avenue, N.E., Washington, District of Columbia 20002, United States; Peter del Tredici, The Arnold Arboretum, Harvard University, 125 Arbor Way, Jamaica Plain, Massachusetts 02130-3159,

United States. Donated by Edward J. Garvey, USDA, ARS, National Germplasm Repository, U.S. National Arboretum, Washington, District of Columbia 20002, United States. Received 01/12/1995.

PI 641692. Kolkwitzia amabilis Graebn.
Wild. WD122; NA 64889; Ames 22268. Collected 09/25/1994 in Hubei, China. Latitude 32° 21' 40" N. Longitude 111° 5' 53" E. Near Yan Chi He. Cut over hillside. Shrub, arching branches, 2.5 meters tall; seed capsules brown.

The following were collected by Quentin Jones, Crops Research Division - USDA-ARS, New Crops Research Branch, Plant Industry Station, Beltsville, Maryland 20705-2350, United States. Donated by Quentin Jones, Crops Research Division - USDA-ARS, New Crops Research Branch, Plant Industry Station, Beltsville, Maryland 20705-2350, United States; USDA, ARS-Midwest Area, National Center for Agricultural Utilization Research, 1815 North University Street, Peoria, Illinois 61604, United States. Received 01/29/1998.

PI 641693. Lavatera punctata All.
Wild. 418; NU 41362; Ames 24396. Collected 1960 in Turkey.

The following were donated by USDA, ARS-Midwest Area, National Center for Agricultural Utilization Research, 1815 North University Street, Peoria, Illinois 61604, United States. Received 01/29/1998.

PI 641694. Malva aegyptia L.
Wild. 44-50; NU 42031; Ames 24440.

The following were donated by Goncalo Sampaio, Instituto de Botanica, Universidade Do Porto, 1191 Rua do Campo Alegre, Porto, Porto 4100, Portugal. Received 08/13/1992.

PI 641695. Malva parviflora L.
Wild. No. 299; 900605; Ames 19349. Collected in Coimbra, Portugal. Latitude 40° 7' N. Longitude 8° 30' W. Pitanca de Baixo, Condeixa, Beira Litoral Province.

The following were donated by Karl Hammer, Inst. fur Pflanzengenetik und Kulturpflanzenforschung, (IPK), Genebank, Gatersleben, Saxony-Anhalt D-06466, Germany. Received 06/10/1993.

PI 641696. Malva verticillata L. **var. verticillata**
Uncertain. MALVA 10/77; Ames 21167. Collected 1938 in Xizang, China. Latitude 32° 0' N. Longitude 90° 0' E. Samye. received as M. verticillata var. tibetica.

The following were donated by Agriculture Canada, Morden Research Station, Unit 100, Morden, Manitoba R6M 1Y5, Canada. Received 04/02/1990.

PI 641697. Shepherdia argentea (Pursh) Nutt.
Wild. 56; Ames 13497. Collected in Canada. Latitude 50° 20' N. Longitude 99° 0' W. Manitoba.

The following were donated by Karl Hammer, Inst. fur Pflanzengenetik und Kulturpflanzenforschung, (IPK), Genebank, Gatersleben, Saxony-Anhalt D-06466, Germany. Received 06/10/1993.

PI 641698. Spergula arvensis L.
Wild. SPER 20/85; Ames 21171. Collected in Czechoslovakia. Latitude 48° 57' N. Longitude 17° 47' E. Elevation 650 m. Small village of Skratova, near Lopenik, in the Bile Karpaty Protected Landscape Area.

The following were collected by Rick J. Lewandowski, Morris Arboretum, The University of Pennsylvania, 9414 Meadowbrook Road, Philadelphia, Pennsylvania 19118, United States; Kevin Conrad, U.S. National Arboretum, USDA, ARS, 3501 New York Avenue, N.E., Washington, District of Columbia 20002, United States; Tiecheng Cui, Xian Botanic Garden, Cuihua South Rd., Xian City, Shaanxi 710061, China; Kunso Kim, Norfolk Botanical Garden, Azalea Garden Road, Norfolk, Virginia 23518, United States; James R. Ault, Chicago Botanic Garden, 1000 Lake Cook Road, P.O. Box 400, Glencoe, Illinois 60022, United States. Donated by Shawn Belt, USDA, ARS, U.S. National Arboretum, National Germplasm Repository, Glenn Dale, Maryland 20769-9157, United States. Received 01/28/1997.

PI 641699. Spiraea blumei G. Don
Wild. QLG 134; NA 67764; Ames 23611. Collected 09/19/1996 in Shaanxi, China. Latitude 33° 40' 52" N. Longitude 106° 48' 59" E. Elevation 1785 m. Liuba Forest Bureau, Miaotaizi Forest Station, Jiang Liang Temple Tourist Area, Liuba County. Growing on a steep, dry hillside in full sun in a mixed evergreen/deciduous woodland along a trail. Slope: 35%. Aspect: south. Multi-stemmed, deciduous shrub with ascending habit; flowering on old wood; 3 meters tall.

The following were donated by Chollipo Arboretum, San186 Uihang-Ni, Sowon-Myon, Taean-Gun, Chungchong Nam 357-931, Korea, South. Received 07/05/1985.

PI 641700. Staphylea bumalda DC.
Wild. Index Seminum 208; Ames 4409. Collected 1985 in Cholla Nam, Korea, South. Latitude 35° 20' 15" N. Longitude 127° 43' 53" E. Mt. Chii. Medium-sized, deciduous shrub.

The following were developed by Ken P. Vogel, USDA, ARS, University of Nebraska, Dept. of Agronomy, Lincoln, Nebraska 68583-0937, United States; R.B. Mitchell, USDA, ARS, University of Nebraska, 344 Keim Hall, Lincoln, Nebraska 68583-0937, United States; T.J. Klopfenstein, University of Nebraska, Dept. of Animal Science, Lincoln, Nebraska 68583, United States; B.E. Anderson, University of Nebraska, Dept. of Agronomy and Horticulture, Lincoln, Nebraska 68583, United States. Received 12/02/2005.

PI 641701. Andropogon gerardii Vitman
Cultivar. "BONANZA". PVP 200600049; CV-13. Pedigree - Developed by 3 generations of breeding using a modified restricted, recurrent selection breeding sytem in which forage yield and forage in vitro dry matter digestibility were the main selection criteria. The base population was

the cultivar Pawnee. Each generation, selected plants were intermated in isolation to produce seed to start the next generation of selection. Bonanza was evaluated as Pawnee C3 in two sets of multi-year forage evaluation trials at Mead, Clay Center, and Concord, NE during the period 1999 to 2002 to evaluate the hay production potential. Concord and Mead are in the tallgrass prairie ecosystem in Plant Hardiness Zones 4 and 5, respectively, while Clay Center is in the transition zone between the tallgrass and midgrass prairie ecoregions in Plant Hardiness Zone 5. One set of trials was managed for hay harvest at the mid to late boot stage of physiological development while the other set was managed for hay harvest after inflorescences were emerged which was about a month later. Forage of Bonanza had significantly greater IVDMD than Pawnee averaged over all trials and had equivalent forage yields. It had greater digestibility than the big bluestem cultivars Rountree and Niagara that can be grown in the same regions. Bonanza was compared to Pawnee in a replicated grazing trial located near Mead, NE during the period 2000 to 2003. Based on weekly samples during the grazing season, there was more forage available in the Bonanza pastures and the forage was significantly higher in IVDMD than in the Pawnee pastures. In the three years of the trial, cattle grazing the Bonanza pastures had 16% greater average daily gain than cattle grazing Pawnee pastures. Bonanza pastures produced 14% more beef cattle gains per acre than Pawnee pastures. Based on an economic analysis, the increased gain by cattle grazing Bonanza pasture in comparison to Pawnee pastures resulted in an increase of $37 per ha net return. Bonanza can be distinguished from Pawnee by its greater forage IVDMD, its greater flag leaf length and width, and a smaller percentage of plants with brown or dark brown glumes and peduncles. It is earlier in maturity than Kaw or Goldmine, similar in maturity to Pawnee, and later in maturity than Rountree, Niagara, and Bison. It is recommended for use in USDA Plant Hardiness Zone 5 and lower Zone 4.

PI 641702. Andropogon gerardii Vitman

Cultivar. "GOLDMINE". PVP 200600048; CV-14. Pedigree - Developed by 3 generations of breeding using a modified restricted, recurrent selection breeding system in which forage yield and forage in vitro dry matter digestibility were the main selection criteria. The base population was the cultivar Kaw. Each generation, selected plants were intermated in isolation to produce seed to start the next generation of selection. Goldmine was evaluated as Kaw C3 in two sets of forage evaluation trials at Mead, Clay Center, and Concord, NE during the period 1999 to 2002. Concord and Mead are in the tallgrass prairie ecosystem in Plant Hardiness Zones 4 and 5, respectively, while Clay Center is in the transition zone between the tallgrass and midgrass prairie ecoregions in Plant Hardiness Zone 5. One set of trials was managed for hay harvest at the mid to late boot stage of physiological development while the other set was managed for hay harvest after inflorescences were emerged which was about a month later. Forage of Goldmine had moderately greater IVDMD than Kaw when harvested before heading or as regrowth. Forage yields of Goldmine were significantly greater than those of Kaw when hay was harvested after heading. Goldmine had greater forage yields and forage IVDMD averaged over all trials and harvests than the cultivars Pawnee, Rountree, and Niagara. Goldmine was compared to Kaw in a replicated grazing trial located near Mead, NE during the period 2000 to 2003. Based on weekly samples during the grazing season, forage availability and IVDMD were similar between Goldmine and Kaw but forage of Goldmine had greater crude protein concentration. In the three years

of the trial, cattle grazing the Goldmine pastures had 7% greater average daily gain than cattle grazing Kaw pastures. Goldmine pastures produced 5% more beef cattle gains per acre than Kaw pastures. Based on an economic analysis, the increased gain by cattle grazing Goldmine pastures in comparison to Kaw pastures resulted in an increase of $11 per ha net return. Goldmine can be distinguished from Kaw by its moderately greater forage IVDMD, its greater flag leaf length and width, and a greater percentage of plants with reddish brown glumes and peduncles. It is similar in to Kaw and later in maturity than Pawnee, Bonanza, and Rountree. Goldmine is recommended for use in USDA Plant Hardiness Zone 6 and lower Zone 5.

The following were developed by Jianxiu Liu, Jiangsu Province & Chinese Academy of Sciences, Institute of Botany, Zhongshanmenwai Qianhuhoucun No. 1, Nanjing, China; Shan-An He, Jiangsu Province and Chinese Academy of Sciences, Institute of Botany, Nanjing, China; Yong-Dong Liu, Jiangsu Province and Chinese Academy of Sciences, Institute of Botany, Nanjing, China. Received 12/09/2005.

PI 641703. Cynodon dactylon (L.) Pers.
Genetic. 96-C-106. GP-2. Pedigree - A selection obtained in a population of bermudagrass land in suburbs of nanjing City, Jiangsu Province, P.R. of China. Characterized with natural turf height as 9.5~12.5cm and with rhizome depth as 7.25~11.5cm. Also characterized by purple red stem, dark green leaf, internodes length from 2.5 to 5.0cm, leaf width from 0.20 to 0.25cm, turf height of 9.5 to 12.5cm, inflorescence length of 2.0 to 2.5cm, inflorescence height of 10.5 to 14.9cm and 1000 seed weight of 0.21 g. Remains green for 270~285 d in Middle and Lower Regions of Yangtze Rive in P.R. of China. 24~45d is needed to obtain 85% coverage with the propagation ratio as 1/5. The dense inflorescence and the seed set could be as high as 63.9% in Nanjing regions. The turf is dense and possesses high resilience and could be mowed as low as 1 cm. Adapted to different adverse growth conditions. Its temporary wilting points is an low as 0.87%. Could tolerate the soil with pH as 9.0 and Nacl solution of soil as high as 2.0%. No severe diseases have been discovered except the pythium blight.

The following were developed by F.M. Bourland, University of Arkansas, Northeast Research and Ext. Center, P.O. Box 48, Keiser, Arkansas 72351, United States; D.C. Jones, Cotton Incorporated, 6399 Weston Parkway, Cary, North Carolina 27513, United States. Received 12/01/2005.

PI 641704. Gossypium hirsutum L.
Breeding. Pureline. Arkot 9406ne. GP-863. Pedigree - La. 850082FN // La. HG-063 / Miscot 8506. Morphological traits are similar to SG105 (check cultivar) except that Arkot 9406ne is nectarless, fewer trichomes on leaves and stems, and smaller bracts. In over 19 replicated field tests in Arkansas, Georgia and Mississippi, yielded 95% as much as SG105. Compared to SG105, Arkot 9406ne tended to higher fibers per seed; similar open bolls percentage, plant height, lint percentage, lint index, seed index, micronaire, and fiber length, and lower seed per area, fiber strength and fiber elongation. Is resistant to all U.S. races of Xanthomonas campestris pv. malvacearum, the causal agent of bacterial blight. Resistance to fusarium wilt, caused by Fusarium oxysporum sp. vasinfectum, was equal to a known resistant check.

Demonstrated a high level of resistance to tarnished plant bug [Lygus lineolaris].

PI 641705. Gossypium hirsutum L.
Breeding. Pureline. Arkot 9605ne. GP-864. Pedigree - Miscot 7918 / Miscot 7803-51 // TX-NLBG8PD23S-1-93. Morphological traits similar to SG105 (check cultivar) except that Arkot 9406ne is nectarless, has fewer trichomes (glabrous) on leaves and stems, and smaller bracts. In over 10 replicated field tests in Arkansas, Georgia and Mississippi, yielded 82% as much as SG105. Compared to SG105, Arkot 9605ne tended to higher open boll percentage, plant height, seed index, and fibers per seed, similar lint index and fiber length, and lower lint percentage, seed per area, micronaire, fiber strength and fiber elongation. Resistant to all U.S. races of Xanthomonas campestris pv. malvacearum, the causal agent of bacterial blight. Demonstrated a high level of resistance to tarnished plant bug [Lygus lineolaris].

PI 641706. Gossypium hirsutum L.
Breeding. Pureline. Arkot 9631ne. GP-865. Pedigree - Arkot 8110 / MD51ne. Morphological traits (including trichomes on leaves, stems and bracts) are similar to SG105 (check cultivar) except that Arkot 9631ne is nectarless and has smaller bracts. In over 10 replicated field tests in Arkansas, Georgia and Mississippi, Arkot 9631ne yielded 96% as much as SG105. Compared to SG105, Arkot 9631ne tended to higher open boll percentage, seed per area, and micronaire; similar lint percentage, and lower plant height, seed index, lint index, fibers per seed, fiber length, fiber strength, and fiber elongation. Resistant to all U.S. races or Xanthomonas campestris pv. malvacearum, the causal agent of bacterial blight. Demonstrated a high level of resistance to tarnished plant bug [Lygus lineolaris].

PI 641707. Gossypium hirsutum L.
Breeding. Pureline. Arkot 9315. GP-866. Pedigree - SG 39 / Arkot 8606. Morphological traits are similar to SG105 (check cultivar) except for smaller bracts. In over 19 replicated field tests in Arkansas, Georgia and Mississippi, Arkot 9315 yielded 4% more than SG105. Compared to SG105, Arkot 9315 tended to higher seed index, lint index, and micronaire; similar open bolls percentage, plant height, lint percentage, fiber length, strength and elongation; and lower seed per area. Resistant to all U.S. races of Xanthomonas campestris pv. malvacearum, the causal agent of bacterial blight. Resistant to fusarium wilt [caused by Fusarium oxysponum sp. vasinfectum] was equal to a known resistant check. Demonstrated resistance levels to tarnished plant bug [Lygus lineolaris] and seedling disease (caused by Rhizoctonia solani) equal to SG105.

PI 641708. Gossypium hirsutum L.
Breeding. Pureline. Arkot 9409. GP-867. Pedigree - SG 125 / Arkot 8606. Morphological traits are similar to SG105 (check cultivar) except that Arkot 9315 has less pubescence on leaves, has smaller bracts, is shorter in height and earlier in maturity. In over 19 replicated field tests in Arkansas, Georgia and Mississippi, Arkot 9315 yielded the same as SG105. Compared ot SG105, Arkot 9409 tended to have similar lint percentage, seed index, lint index, seed per area, and fiber properties. Resistant to all U.S. races of Xanthomonas campestris pv. malvacearum, the causal agent of bacterial blight. Resistance to fusarium wilt [caused by Fusarium oxysporum sp. vasinfectum] was equal to a known resistant

check. Demonstrated resistance levels to tarnished plant bug [Lygus lineolaris] equal to SG105. Resistance to seedling disease (caused by Rhizoctonia solani) was significantly higher than SG105.

The following were developed by Ken Russell, University of Nebraska-Lincoln, Department of Agronomy and Horticulture, 279 Plant Science Bldg., 38th and Fair, Lincoln, Nebraska 68583-0915, United States. Received 12/06/2005.

PI 641709. Zea mays L. **subsp. mays**
Breeding. Population. NB 0. GP-510. Pedigree - Developed by intermating 3 selected sub-populations of the original B synthetic, which was synthesized by open-pollination in isolation of the following 32 inbred lines: A, A374, A375, C.C. 16, C.C. 5, C.C. 7, I198,1234, Ill.5120, Ill.530,Ill.90, Ill.A-48, Ill.D6, Ill.K, Ill.L, Ill.R4, ITE701, K4, M14, Oh04, Oh26-14, Oh28, Oh40b, Oh51A, Oh54-14, Oh608B, Os426, P8, Pr, Tr, US4-8, and US540. Reaches 50% silk emergence in approximately 1500 heat units.

PI 641710. Zea mays L. **subsp. mays**
Breeding. Population. NS 0. GP-511. Pedigree - Developed from the Iowa Stiff Stalk population formed with equal contributions from each of the following 16 inbreds: A3G-3-1-3, CI187-2, CI540, CI617, F1B1-7-1, I159, 1224, Ill.12E, Ill.Hy, Ind.461-3, Ind.Ah83, Ind.Tr9-1-1-6, LE23 and Oh3167B, Os420, and WD456. Developed from the Iowa Stiff Stalk population obtained by John Lonnquist from Geroge Sprague in 1948 by two cycles of selection for general combining ability. This population reaches 50% silk emergence in approximately 1475 heat units.

The following were developed by Baffour Badu-Apraku, International Institute of Tropical Agriculture, c/o L.W. Lambourne & Co., Carolyn House, Cryodon, England CR9 3EE, United Kingdom. Donated by Baffour Badu-Apraku, International Institute of Tropical Agriculture, c/o L.W. Lambourne & Co., Carolyn House, Cryodon, England CR9 3EE, United Kingdom; S. Twumasi-Afriyie, CIMMYT-Nairobi, Addis Ababa, Ethiopia; P.Y.K. Sallah, Institut des Sciences Agronomiques du Rwanda (ISAR), Maize and Wheat Improvement Program, Ruhengeri, Rwanda; W. Haag, SG 2000, C.P. 4247, Maputo, Mozambique; E. Asiedu, CRI, Box 3785, Dumasi, Ghana; K.A. Marfo, CRI, Box 3785, Kumasi, Ghana; S. Dapaah, CRI, Box 3785, Kumasi, Ghana; B.D. Dzah, SG 2000, Kumasi, Ghana. Received 12/09/2005.

PI 641711. Zea mays L. **subsp. mays**
Cultivar. Inbred. "OBATANPA GH"; OBATANPA. CV-1. Pedigree - Population 63 SR. Tropically adapted intermediate maturing open pollinated maize cultivar. Is a white dent/flint endosperm Quality Protein Maize (QPM) with elevated levels of lysine and Tryptophan. Has good levels of resistance to the maize streak virus (MSV), lowland rust (incited by Puccinia polysora), and moderate levels of resistance to blight caused by Bipolaris maydis. Silks at 55 days after planting with a plant height of 205 cm. Has an average grain yield of 4968 kg/ha. Results of laboratory analysis for total protein and tryptophan showed that it contains 10.0% total protein in the grain with 0.88% tryptophan in the protein.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 08/18/1989.

PI 641712. Trifolium angustifolium L.
Wild. 210589-01; W6 710; Grif 1542. Collected 05/21/1989 in Izmir, Turkey. Latitude 38° 11' N. Longitude 26° 47' E. Elevation 20 m. Large rock outcroping 300 to 400m from seashore, near Seferihisar and the ancient Greek ruins of Teos, Izmir Province. Flowers borne on upright pedicle 10 to 15cm tall.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Calvin R. Sperling, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 402, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States; Z. Kutlu. Donated by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 08/08/1989.

PI 641713. Trifolium campestre Schreb.
Wild. 110689-0107; W6 160; Grif 14226. Collected 06/11/1989 in Turkey. Latitude 37° 46' N. Longitude 42° 8' E. Elevation 1100 m. Northeast facing slope (30-35%), newly reforested, formerly grazed. Loose rocky limestone soil. 5km W of Eruh on Siirt-Eruh road, Siirt Province.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Calvin R. Sperling, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 402, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 09/15/1989.

PI 641714. Trifolium campestre Schreb.
Cultivated. 010689-0205; W6 1976; Grif 14227. Collected 06/01/1989 in Elazig, Turkey. Latitude 38° 30' N. Longitude 39° 22' E. Elevation 1270 m. Soil clay red, rocky. NE facing slope, scattered oak scrub, grazed. Associated with Crateagus, Prunus sp. NW side of Hazar Lake, near cemetery, approximately 3km S of Firat Univ. Res. Sta. On road Elazig to Diyarbakir. Annual. Erect to 8cm tall.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 08/18/1989.

PI 641715. Trifolium hirtum All.
Wild. 210589-02; W6 711; Grif 1543. Collected 05/21/1989 in Izmir, Turkey. Latitude 38° 11' N. Longitude 26° 47' E. Elevation 20 m. Large rock outcroping 300 to 400m from seashore, near Seferihisar and the ancient Greek ruins of Teos, Izmir Province. Plants prostrate.

The following were collected by Harold E. Bockelman, USDA, ARS, National Small Grains Collection, 1691 S 2700 W, Aberdeen, Idaho 83210, United States; Richard C. Johnson, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Roman Boguslavsky, National Centre for Plant Genetic Resources of Ukraine, Lab. for Introduction & Storage of Plant Genetic Resources, Yurjev Institute of Plant Production, Kharkiv, Kharkiv 61060, Ukraine; Vladislav Korzhenevsky, State Nikitsky Botanical Gardens, Department of Flora & Vegetation, Yalta, Krym 334267, Ukraine. Received 10/25/1999.

PI 641716. Trifolium hirtum All.
Wild. UKR-99-019; Grif 14868. Collected 07/27/1999 in Krym, Ukraine. Latitude 44° 30' 37" N. Longitude 34° 14' E. Elevation 300 m. Near and around Nikita Botanical Garden. South slope, rocky.

The following were collected by Peter Cunningham, Dept. of Agriculture & Rural Affairs, Pastoral Research Institute, P.O. Box 180, Hamilton, Victoria 3300, Australia; Mohamed Chakroun, INRAT, Forage Improvement Laboratory, Rue Hadi Karray, Ariana, Tunisia; Walter Graves, University of California, Cooperative Extension Service, 777 E. Rialto Avenue, San Bernadino, California 92415-0730, United States. Received 08/19/1994.

PI 641717. Trifolium isthmocarpum Brot.
Wild. T040.CPG94; Grif 14204; W6 16014. Collected 06/23/1994 in Tunisia. Latitude 36° 45' 59" N. Longitude 9° 11' 46" E. Elevation 170 m. Near Beja, 4.5 k north of Beja on MC52. Grazed. Slope 0-5%, aspect S. Open. Soil clay. Seasonally flooded, stream terrace. Vegetation closed, seasonal tall grass. Surrounding veg. dryland wheat. Dominant herb/grass sp. couch, bermuda. Assoc. sp. Medics, Lotus c., T. fragiferum, clovers. Population abundance occasional, distribution patchy. Growth habit semi-erect.

The following were collected by Peter Cunningham, Dept. of Agriculture & Rural Affairs, Pastoral Research Institute, P.O. Box 180, Hamilton, Victoria 3300, Australia; Walter Graves, University of California, Cooperative Extension Service, 777 E. Rialto Avenue, San Bernadino, California 92415-0730, United States; Abdelmajid Mezni, Tunisia. Received 08/19/1994.

PI 641718. Trifolium isthmocarpum Brot.
Wild. T083.CPG94; Grif 14209; W6 16057. Collected 06/27/1994 in Tunisia. Latitude 36° 52' 44" N. Longitude 9° 25' 29" E. Elevation 162 m. Near Beja, 36 k northeast of Beja on P11 Hw. Grazed. Slope 0-5%, aspect S. Area open. Soil clay, pH 8.0-8.5. Rainfall 525 mm. Moist, stream terrace. Vegetation closed, seasonal tall grass. Surrounding veg. dryland wheat, melons. Dominant herb/grass species couch, bermuda, Juncus sp. Population abundance occasional, distribution patchy. Growth habit semi-erect.

PI 641719. Trifolium isthmocarpum Brot.
Wild. T099.CPG94; Grif 14210; W6 16073. Collected 06/28/1994 in Tunisia. Latitude 36° 40' 54" N. Longitude 8° 42' 33" E. Elevation 400 m. Near Fernana (Gouadia), 3 k northeast of Fernana toward Beni M'tir on C65. Grazed. Slope 11-40%, aspect SE. Area open. Soil loam-clay, pH 8.0. Rainfall 1000+ mm. Moist, stream terrace. Vetetation closed, seasonal tall grass. Surrounding veg. dryland wheat. Population abundance occasional, distribution patchy. Growth habit semi-erect.

PI 641720. Trifolium isthmocarpum Brot.
Wild. T118.CPG94; Grif 14211; W6 16092. Collected 06/30/1994 in Tunisia. Latitude 36° 55' 14" N. Longitude 8° 44' 27" E. Elevation 40 m. Near Tabarka, 5 k south of Tabarka off P17 on dirt road 3 k from 2 k marker. Grazed. Slope 0-5%, aspect E. 1/4 shade. Soil loam, pH 6.5. Rainfall 1100+ mm. Moist, alluvial fan, paddock. Vegetation closed, seasonal tall grass. Surrounding veg. evergreen open forest with closed lower layers. Population abundance frequent, distribution patchy. Growth habit semi-erect.

The following were collected by Peter Cunningham, Dept. of Agriculture & Rural Affairs, Pastoral Research Institute, P.O. Box 180, Hamilton, Victoria 3300, Australia; Walter Graves, University of California, Cooperative Extension Service, 777 E. Rialto Avenue, San Bernadino, California 92415-0730, United States; Leonardo Sulas, Sardinia, Italy. Received 08/19/1994.

PI 641721. Trifolium michelianum Savi
Wild. S060.CPG94; Grif 14212; W6 16165. Collected 07/06/1994 in Sardinia, Italy. Latitude 40° 17' 17" N. Longitude 8° 42' 27" E. Elevation 610 m. Macomer, 7 k west of Macomer to Bosa on road S121bis. Grazed. Slope 0-5%, aspect E. Area open. Soil loam, pH 4.0-4.5. Rainfall 1014 mm. Seasonally inundated, floodplain. Vegetation closed, seasonal tall grass. Surrounding veg. evergreen open forest with closed lower layers. Population abundance occasional, distribution patchy. Growth habit semi-erect.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 06/01/1989.

PI 641722. Trifolium scabrum L.
Wild. WJK 21; Grif 12628; W6 2759. Collected 05/18/1989 in Syria. Latitude 36° 12' N. Longitude 37° 10' E. Elevation 400 m. Among rocks on a hill about 30km northeast of Aleppo, near Fefeen village.

The following were collected by Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Alicia Massa, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States; Raul Lira, INIA Kampenaike, Angamos 1056, Casilla 277, Punta Arenas, Magallanes, Chile; Mercedes Masco, INTA, E.E.A. Santa Cruz, CC 332, Rio Gallegos, Santa Cruz 9400, Argentina; Gabriel Oliva, INTA, E.E.A. Santa Cruz, CC 332, Rio Gallegos, Santa Cruz 9400, Argentina; Ivette Sequel, CRI Carillanca, General Lopez, IX Region, Temuco, La Araucania, Chile. Received 10/23/2001.

PI 641723. Trifolium spadiceum L.
Wild. PRO 96-60; Grif 15006. Collected 02/23/1996 in Chile. Latitude 51° 47' 49" S. Longitude 72° 9' 59" W. Elevation 20 m. Ultima Esperanza, Ea. Rio Tranquilo. Collected by the road 2 km northwest from Tranquilo. Alluvial sloping plain 10-15% NE, sandy-loam soil, very stony with poor drainage. Wildland seed, 100% seed maturity, 0.10 m tall. Introduced species. Over mature.

PI 641724. Trifolium spadiceum L.
Wild. PRO 96-78; Grif 15007. Collected 02/27/1996 in Chile. Latitude 54° 6' S. Longitude 68° 44' 21" W. Tierra del Fuego, Ea. Vicuna. Collected by side of road 1 km northwest from Casco estancia on road between Lago Blanco and cabins Tierra del Fuego. Wavy slope 3% NE, organic soil with moderate drainage. Wildland seed, 90% seed maturity, plants abundant at site, 0.10 m tall.

PI 641725. Trifolium spadiceum L.
Wild. PRO 96-88; Grif 15008. Collected 02/28/1996 in Chile. Latitude 54° 39' 3" S. Longitude 64° 47' 6" W. Tierra del Fuego, Lago Escoridido, 52 km southwest from Tolhuin, 130 m above Lago Fagnano. Mountain slopes 5% NE, clay-loam soil, moderately stony with moderate drainage. Wildland seed, 100% seed maturity, plants over mature.

The following were collected by Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Nicolay Portinier, Kamorov Institute of Botany, St. Petersburg, Leningrad, Russian Federation; Nicolay Khitrov, Dokvchaev Soil Institute, Pygevsky, per., 7., Moscow, Moscow 109017, Russian Federation. Received 01/1996.

PI 641726. Trifolium striatum L.
Wild. 0156; W6 18309; Grif 14215. Collected 07/09/1995 in Russian Federation. Latitude 45° 20' N. Longitude 36° 49' E. Elevation 104 m. Province Temrjuk/Novorossiysk, 9 km southwest of Temrjuk, village Gorelaya. Area grazed. Slope 0-5, 6-10, and 11-40%, aspect S. Light open. Soil clay, pH 5.3-basic. Seasonally dry, upper slope. Vegetation closed-open, evergreen dwarf shrub steppe savanna. Surrounding vegetation evergreen steppe. Dominant tree species mainly absent, edge of Hornbeam-Oak zone. Dominant shrub species Artemisia austriaca. Dominant herb/grass species Salvia sp., Inula sp., Festuca sp., Stipa sp., Agropyron sp. Population distribution patchy, abundance frequent. G rowth habit erect. Dry heads. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641727. Trifolium striatum L.
Wild. D3; W6 18578; Grif 14216. Collected in Krasnodar, Russian Federation. Latitude 44° 47' N. Longitude 38° 34' E. Elevation 190 m. Province Krasnodar, 5 km south of Il'skaya, southwest of Krasnodar. Grazed. Slope 0-10%, aspect NE. Light open. Soil sand, loam, pH 4.6-5.3. Seasonally dry, upper slope. Vegetation closed, seasonal broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species Quercus sp. Dominant shrub species Ribes sp., Prunus sp., Caprinus sp., Crataegus sp. Dominant herb/grass species Daucus carota, Potentilla sp., Festuca pratensis, Medicago falcata, Lotus c., Dorycnium intermedium, Dorycnium graceum. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 641728. Trifolium striatum L.
Wild. VIR D5; W6 18585; Grif 14217. Collected 07/07/1995 in Russian Federation. Latitude 44° 48' 30" N. Longitude 38° 21' E.

Elevation 80 m. Near South Kholmskiy, near settlement. Area grazed. Southern slope of narrow gully. Slope 15'. Open. Soil grey forest loams, many stones, pH 4.3-4.7 (water's). Moist to seasonally dry. Vegetation closed, meadow. Legumes, clovers, T. campestre, T. pratense, Lotus corniculatus, Coronilla varia, Lathyrus sp., Medicago falcata. Grasses Phleum pratense, Agrostis sp. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

The following were developed by Gregory E. Shaner, Purdue University, Dept. of Botany & Plant Pathology, 1155 Lilly Hall, West Lafayette, Indiana 47907-2054, United States; George Buechley, Purdue University, Dept. of Botany and Plant Pathology, 915 W. State St., West Lafayette, Indiana 47907-2054, United States. Received 08/05/2004.

PI 641729. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 1-5; NSGC 17643. Pedigree - selection from Chokwang. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction 0.6 to 1.0.

PI 641730. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 6-9; NSGC 17644. Pedigree - selection from Chukoko 81. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction 0.2 to 1.0.

PI 641731. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 10-11; NSGC 17645. Pedigree - selection from Funo, CI14349. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction 1 to 2.

PI 641732. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 12; NSGC 17646. Pedigree - selection from Marimp 3, CI15165. Resistant to Fusarium Head Blight (Scab). Contains Type I resistance - resistance to initial infection. Spray reaction = 3.

PI 641733. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 13-16; NSGC 17647. Pedigree - selection from Mentana, CI12448. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point Reaction 0.8 to 2.0.

PI 641734. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 17-18; NSGC 17648. Pedigree - selection from Mentana, CI12448. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction = 1.0.

PI 641735. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 19-24; NSGC 17649. Pedigree - selection from Ning 7840, PI531188. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction 0 to 1.

PI 641736. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 21-22; NSGC 17650. Pedigree - selection from Ning 7840, PI531188. Resistant to Fusarium Head Blight (Scab). Contains Type I resistance - resistance to initial infection. Spray reaction 1 to 5.

PI 641737. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 25-26; NSGC 17651. Pedigree - selection from Oscar III, CI15126. Resistant to Fusarium Head Blight (Scab). Contains Type I resistance - resistance to initial infection. Spray reaction = 1.

PI 641738. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 27-28; NSGC 17652. Pedigree - selection from Oscar V, CI15128. Resistant to Fusarium Head Blight (Scab). Contains Type I resistance - resistance to initial infection. Spray reaction = 1.

PI 641739. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 29-32; NSGC 17653. Pedigree - selection from Oscar V, CI15128. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction 0.6 to 2.

PI 641740. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 33-36; NSGC 17654. Pedigree - selection from Oscar V, CI15128. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction 0.4 to 1.0.

PI 641741. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 37-42; NSGC 17655. Pedigree - selection from Oscar V, CI15128. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction 0.6 to 1.0.

PI 641742. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 39-40; NSGC 17656. Pedigree - selection from Oscar V, CI15128. Resistant to Fusarium Head Blight (Scab). Contains Type I resistance - resistance to initial infection. Spray reaction = 2.

PI 641743. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 43-44; NSGC 17657. Pedigree - selection from Oscar V, CI15128. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction 0.8 to 0.9.

PI 641744. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 45-47; NSGC 17658. Pedigree - selection from Oscar V, CI15128. Resistant to Fusarium Head Blight (Scab). Contains Type I resistance - resistance to initial infection. Spray reaction = 2.

PI 641745. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 46-50; NSGC 17659. Pedigree - selection from Oscar V, CI15128. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction 0.3 to 2.0.

PI 641746. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 51; NSGC 17660. Pedigree - selection from Oscar VI, CI15129. Resistant to Fusarium Head Blight (Scab). Contains Type I resistance - resistance to initial infection. Spray reaction = 1.

PI 641747. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 52-53; NSGC 17661. Pedigree - selection from

Oscar VI, CI15129. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaciton 0.2 to 1.

PI 641748. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 54-55; NSGC 17662. Pedigree - selection from Paula VZ 434, CI15156. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction 2.2 to 8.0.

PI 641749. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 56-57; NSGC 17663. Pedigree - selection from Paula VZ 434, CI15156. Resistant to Fusarium Head Blight (Scab). Contains Type I resistance - resistance to initial infection. Spray reaction 3 to 4.

PI 641750. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 58-61; NSGC 17664. Pedigree - selection from Paula VZ 434, CI15156. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction 0 to 1.

PI 641751. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 62-63; NSGC 17665. Pedigree - selection from San Pastore, PI157918. Resistant to Fusarium Head Blight (Scab). Contains Type I resistance - resistance to initial infection. Spray reaction = 1.

PI 641752. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 64-65; NSGC 17666. Pedigree - selection from San Pastore, PI157918. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction = 0.6.

PI 641753. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 66-69; NSGC 17667. Pedigree - selection from Sumai 3, PI481542. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction 4 to 5.

PI 641754. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 67-68; NSGC 17668. Pedigree - selection from Sumai 3, PI481542. Resistant to Fusarium Head Blight (Scab). Contains Type I resistance - resistance to initial infection. Spray reaction 5 to 7.

PI 641755. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 70-73; NSGC 17669. Pedigree - selection from SW202. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction 0.1 to 0.8.

PI 641756. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 74-77; NSGC 17670. Pedigree - selection from Tilchifun 2, CI15166. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction 0.6 to 1.0.

PI 641757. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 78-81; NSGC 17671. Pedigree - selection from Tilchifun 2, CI15166. Resistant to Fusarium Head Blight (Scab).

Contains Type II resistance - resistance to spread. Point reaction 0.8 to 1.7.

PI 641758. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 82-83; NSGC 17672. Pedigree - selection from Victor IV, CI15123. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction 1.6 to 1.9.

PI 641759. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 84-85; NSGC 17673. Pedigree - selection from Victor V, CI15124. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction 0.2 to 0.6.

PI 641760. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 87-88; NSGC 17674. Pedigree - selection from Victor V, CI15124. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction = 3.

PI 641761. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 89-90; NSGC 17675. Pedigree - selection from Victor V, CI15124. Resistant to Fusarium Head Blight (Scab). Contains Type I resistance - resistance to initial infection. Spray reaction = 2.

PI 641762. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 91-94; NSGC 17676. Pedigree - selection from Y5418. Resistant to Fusarium Head Blight (Scab). Contains Type I resistance - resistance to initial infection. Spray reaction = 2.

PI 641763. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 92-96; NSGC 17677. Pedigree - selection from Y5418. Resistant to Fusarium Head Blight (Scab). Contains Type II resistance - resistance to spread. Point reaction = 1.0.

PI 641764. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 97; NSGC 17678. Pedigree - selection from Y891. Resistant to Fusarium Head Blight (Scab). Contains Type I resistance - resistance to initial infection. Spray reaction = 1.

PI 641765. Triticum aestivum L. **subsp. aestivum**
Breeding. Pureline. SSL 98-102; NSGC 17679. Pedigree - selection from Y891. Resistant to Fusarium Head Blight (Scab). Contains type II resistance - resistance to spread. Point reaction 0.4 to 0.8.

The following were collected by Calvin R. Sperling, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 402, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 03/07/1990.

PI 641766. Vigna radiata (L.) R. Wilczek
Cultivated. USSR-05-02.2; W6 6269; Grif 12297. Collected 09/1989 in Tajikistan. Latitude 38° 35' N. Longitude 68° 48' E. Collected in a market in Dushanbe, Takikistan. The seed was mixed with seed of chickpea (Cicer arietinum) line USSR-05-02.

The following were developed by William D. Branch, University of Georgia, Coastal Plain Experiment Station, Department of Crop and Soil Sciences, Tifton, Georgia 31793-0748, United States. Received 12/13/2005.

PI 641767. Arachis hypogaea L.
Cultivar. Pureline. "GEORGIA-05E". CV-82; PVP 200600059. Pedigree - Georgia-01R x GA 942010. Significantly lower in total disease incidence (26 v 34%), higher in yield (4660 v. 4135 kg ha-1), better in total sound mature kernel (TSMK) grade 76 v 73%), larger in percentage (50 v 41%) of extra large kernels (ELK), and greater in dollar value return (2051 v. 1656 $ ha-1) when compared to another high-oleic virginia-type cultivar, Georgia Hi-O/L. When planted early for greater disease pressure, found to be significantly lower in TSWV disease incidence and significantly higher in yeild, TSMK grade, and dollar value returns per hectare compared to other non high-oleic virginia-type cultivars, Perry, Gregory, NC-V 11 and Wilson. Has shown TSWV and leafspot resistance comparable to some of the more disease resistant runner-type cultivars w hen grown without any pesticide during 2003 -2004. Has shown moderate insect resistance to potato leafhopper. Higher percentage of ELK compared to other virginia-type cultivars. Similar to NC 7 in oil content, blanchability and roasted flavor. Has runner growth habit, late maturity (2-3 wk later than other virginia-types in southern Georgia) and a tan testa color. Has a lower O/L ratio (about 35.1) compared to the very high oleic Georgia Hi-O/L (about 40:1) but does have significantly higher O/L ratio (35.0 v 3.7) and lower iodine value (72 v 86) compared to mid-oleic cultivar NC 7.

PI 641768. Arachis hypogaea L.
Genetic. Pureline. Lutescent-Leaf. GS-9. Pedigree - Originated as an off-type plant in the F9 advanced Georgia peanut breeding line, GA 931307. Neither parent, Gerogia Runner x Southern Runner, early segregating progenies or previous years of testing GA 931307 showed this distinct leaf characteristic. It is assumed that Lutescent-Leaf rose as a spontaneous mutation. Has unusually bright yellow leaf color. Develops to maturity under direct sunlight. Readily apparent at the early seedling stage. Younger age leaves and plants are more pronounced than older leaves and plants for the bright yellow color, which is opposite from the aureus mutant. Has a runner growth habit and medium matutiry with nodules present on the roots, distinguishing it from the yellowish leaves caused by non-nodulation mutants. Has a tan testa color, large seed weight (about 85g 100-1 seed), and an oleic (18:1) to linoleic (18:2) fatty acid oil ratio 1.7 to 1. This genetic stock can be used as an unusual leaf marker in linkage or other genetic recombination studies.

The following were developed by Seminis Vegetable Seeds, Inc., United States. Received 10/20/2005.

PI 641769 PVPO. Citrullus lanatus (Thunb.) Matsum. & Nakai
Cultivar. "COMPANION". PVP 200300037.

The following were developed by Pure Seed Testing, Inc., P.O. Box 449, Hubbard, Oregon 97032, United States. Received 10/20/2005.

PI 641770 PVPO. Poa pratensis L.
Cultivar. "FULL MOON". PVP 200500316.

The following were developed by Blue Moon Farm LLC, Lebanon, Oregon, United States. Received 10/20/2005.

PI 641771 PVPO. Lolium perenne L.
Cultivar. "METROPOLITAN". PVP 200500318.

The following were developed by WestBred LLC, 8111 Timberline Dr., Bozeman, Montana 59718, United States. Received 10/20/2005.

PI 641772 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. Pureline. "SANTA FE"; G980039. PVP 200500319. Pedigree - G1878/Jagger = Hawk//Sturdy/Plainsman V/3/Jagger. Hard red winter wheat.

The following were developed by Seminis Vegetable Seeds, Inc., United States. Received 10/20/2005.

PI 641773 PVPO. Solanum lycopersicum L.
Cultivar. "FDR 14-2056". PVP 200500320.

The following were developed by Monsanto Technology, LLC, St. Louis, Missouri, United States. Received 10/20/2005.

PI 641774 PVPO. Gossypium hirsutum L.
Cultivar. "ST 4575BR". PVP 200500321.

PI 641775 PVPO. Gossypium hirsutum L.
Cultivar. "ST 4686R"; STX4686R. PVP 200500322.

PI 641776 PVPO. Gossypium hirsutum L.
Cultivar. "ST 6636BR". PVP 200500323.

PI 641777 PVPO. Gossypium hirsutum L.
Cultivar. "ST 6848R". PVP 200500324.

The following were developed by Virginia Tech Intellectual Properties, Inc., Virginia, United States. Received 10/20/2005.

PI 641778 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. "3706"; VA98W-706. PVP 200500325. Pedigree - VA91-54-350//FFR555W/GA-Gore.

The following were developed by 3 Star Lettuce, LLC, United States. Received 10/20/2005.

PI 641779. Lactuca sativa L.
Cultivar. "MIGHTY JOE". PVP 200500326.

The following were developed by North Carolina Agricultural Research Service, North Carolina, United States. Received 10/20/2005.

PI 641780 PVPO. Avena sativa L.
Cultivar. Pureline. "SS 76-40"; NC97-8885. PVP 200500327. Pedigree - selection from a broad-based winter and spring oat breeding population.

The following were developed by Monsanto Technology, LLC, St. Louis, Missouri, United States. Received 10/20/2005.

PI 641781 PVPO. Gossypium hirsutum L.
Cultivar. "NG3969R". PVP 200500328.

PI 641782 PVPO. Gossypium hirsutum L.
Cultivar. "ST 3664R". PVP 200500329.

The following were developed by Blue Moon Farm LLC, Lebanon, Oregon, United States. Received 10/20/2005.

PI 641783 PVPO. Lolium perenne L.
Cultivar. "CASPER". PVP 200500331.

The following were developed by Lebanon Seaboard Corporation, United States. Received 10/20/2005.

PI 641784 PVPO. Agrostis canina L.
Cultivar. "LEGENDARY". PVP 200500332.

PI 641785 PVPO. Agrostis stolonifera var. palustris (Huds.) Farw.
Cultivar. "DECLARATION". PVP 200500333.

The following were developed by Oregon State University, Corvalis, Oregon, United States. Received 10/20/2005.

PI 641786 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. "ORSS-1757"; OR9801757. PVP 200500336. Pedigree - Yamhill/Hyslop//Stephens/3/OR7946/Hill//Hill(WSQ910137)/4/Sambo/Heine4//Stephens/3/Wattines//Yamhill/Hyslop.

PI 641787 PVPO. Triticum aestivum L. **subsp. aestivum**
Cultivar. "ORCF-102". PVP 200500337. Pedigree - Madsen/CV9804//Weatherford.

The following were developed by Progene Plant Research, Othello, Washington, United States. Received 10/20/2005.

PI 641788 PVPO. Pisum sativum L.
Cultivar. "WHISTLER". PVP 200500341.

The following were developed by 3 Star Lettuce, LLC, United States. Received 10/20/2005.

PI 641789 PVPO. Lactuca sativa L.
Cultivar. "CHALLENGER". PVP 200500342.

PI 641790 PVPO. Lactuca sativa L.
Cultivar. "MANATEE". PVP 200500343.

The following were developed by Seminis Vegetable Seeds, Inc., United States. Received 10/20/2005.

PI 641791 PVPO. Solanum lycopersicum L.
Cultivar. "FDR 15-2079". PVP 200500344.

The following were developed by 3 Star Lettuce, LLC, United States. Received 10/20/2005.

PI 641792 PVPO. Lactuca sativa L.
Cultivar. "IRONWOOD". PVP 200500345.

PI 641793 PVPO. Lactuca sativa L.
Cultivar. "OCOTILLO". PVP 200500346.

The following were developed by Coors Global Properties, Inc., Lakewood, Colorado, United States. Received 10/20/2005.

PI 641794 PVPO. Hordeum vulgare L. **subsp. vulgare**
Cultivar. "MORAVIAN 69". PVP 200500348.

The following were developed by Louisiana State University Agricultural Center, Louisiana, United States. Received 10/20/2005.

PI 641795 PVPO. Oryza sativa L.
Cultivar. "CL131". PVP 200500349. Pedigree - CL161//Kaybonnet/LA2031.

The following were developed by Steven D. Linscombe, Louisiana State University, LSU Rice Experiment Station, 1373 Caffey Road, Rayne, Louisiana 70578, United States; Richard Dunand, Louisiana State University, Rice Research Station, 1373 Caffey Road, Rayne, Louisiana 70578, United States; M.C. Rush, Louisiana State University, Louisiana Agric. Exp. Station, Dept. of Plant Pathology, Baton Rouge, Louisiana, United States; Xueyan Sha, Louisiana State University, Louisiana Agric. Exp. Station, Rice Research Station, Rayne, Louisiana 70578, United States; Louisiana State University Agricultural Center, Louisiana, United States; K. Bearb, Rice Research Station, 1373 Caffey Road, Rayne, Louisiana 70578, United States; Qiren Chu, RiceTec, Inc., P.O. Box 1305, Alvin, Texas 77512, United States; D.E. Groth, Louisiana State University AgCenter, Rice Research Station, 1373 Caffey Road, Rayne, Louisiana 70578, United States; J.A. Bond, Louisiana State University AgCenter, Rice Research Station, 1373 Caffey Road, Rayne, Louisiana 70578, United States; L.M. White, Louisiana State University, Rice Research Station, 1373 Caffey Road, Rayne, Louisiana 70578, United States. Received 10/20/2005.

PI 641796. Oryza sativa L.
Cultivar. Pureline. "TRENASSE". PVP 200500350; CV-121; Utility Patent 11/232493. Pedigree - Cypress//L-202/Tebonnet/3/LSBR-5. Released 2004. Very early maturing, short stature, high yielding long-grain rice cultivar with good milling and grain quality. Susceptible to sheath blight (caused by Rhizoctonia solani) and leaf blast (caused by Pyricularia grisea) but is moderately resistant to the physiological disorder straighhead.

The following were developed by Pure Seed Testing, Inc., P.O. Box 449, Hubbard, Oregon 97032, United States; University of Georgia Research Foundation, Inc., Athens, Georgia, United States. Received 10/20/2005.

PI 641797 PVPO. Paspalum vaginatum Sw.
Cultivar. "SEA SPRAY". PVP 200600001.

The following were developed by Cascade International Seed Company, 8483 W. Stayton Rd., Aumsville, Oregon 97325, United States. Received 10/20/2005.

PI 641798 PVPO. Poa pratensis L.
Cultivar. "MONGOOSE". PVP 200600002.

The following were developed by R. Walton Mozingo, Tidewater Agricultural Research, and Extension Center, 6321 Holland Road, Suffolk, Virginia 23437, United States; Terry A. Coffelt, USDA, ARS, U.S. Water Conservation Laboratory, 4331 E. Broadway Rd., Phoenix, Arizona 85040-8807, United States; P.M. Phipps, Virginia Polytechnic Inst. and State Univ., Tidewater Agric. Res. and Ext. Center, 6321 Holland Rd., Suffolk, Virginia 23437, United States; Dennis L. Coker, Virginia Tech, 6321 Holland Road, Suffolk, Virginia 23437, United States. Received 01/06/2006.

PI 641799. Arachis hypogaea L.
Cultivar. Pureline. "CHAMPS". CV-87. Pedigree - VA 8911215 / VA-C 92R. Plants of CHAMPS have a runner growth habit. Main stem height (297 mm) is slightly shorter than NC 7 (330 mm) (Wynne et al., 1979) or Wilson (322 mm) (Mozingo et al., 2004), equal to NC-V 11 (297mm) (Wynne et al., 1991), but taller than VA 98R (282 mm) (Mozingo et al., 2000). Pod characteristics such as shape, size, and bright color make CHAMPS ideal for the in-shell trade. Measurements of pod brightness were determined by a colorimeter using Hunter L scores (higher number indicates brighter pod color). CHAMPS has similar scores to VA 98R and Wilson, slightly brighter pod color than NC-V 11 and much brighter than NC 7 for both the jumbo and fancy-sized pods. Total kernel content of CHAMPS averaged approximately 1 to 4% higher than other cultivars tested. The blanchability of CHAMPS is equal to popular Virginia-type cultivars (Mozingo, 2004). CHAMPS (20 hits 24 m-1) is similar to Wilson and VA 98R (22 and 19 hits 24 m-1, respectively), but is lower than NC-V 11 (26 hits 24 m-1) in susceptibility to sclerotinia blight (caused by Sclerotinia minor Jagger). For tomato spotted wilt virus (TSWV) caused by Tospovirus, CHAMPS is equal to NC-V 11 (the most TSWV resistance large-seeded Virginia-type cultivar currently available) in susceptibility (24% of row with symptoms for each cultivar). However, CHAMPS showed less susceptibility than either Wilson or VA 98R (both with 29% of row infection) to TSWV. Although not selected for

resistance to cylindrocladium black rot (CBR) caused by Cylindrocladium parasiticum Crous, Wingfield, and Alfenas, CHAMPS has tolerance similar to that of Wilson which is rated as moderately resistant. CHAMPS with 37% infected leaflets is not as susceptible as Wilson (44%), NC-V 11 (69%) or VA 98R (81%) to web blotch caused by Phoma arachidicola Marasas, Paver, & Boerema. Susceptibility of CHAMPS to other diseases and insects has not been observed. Based on general observations, CHAMPS responds to recommended insect and di.

The following were developed by Nathan J. Olivas, GeneFresh, Inc., 21860 Rosehart Way, P.O. 2143, Salinas, California 93902-2143, United States. Received 10/20/2005.

PI 641800 PVPO. Lactuca sativa L.
Cultivar. "FARNSWORTH 71". PVP 200600006.

The following were developed by Texas Agricultural Experiment Station, Texas, United States. Received 10/20/2005.

PI 641801 PVPO. X Triticosecale sp.
Cultivar. "TAMcale 5019". PVP 200600007. Pedigree - OAC Decade/NE86T637//NE86T653.

PI 641802 PVPO. X Triticosecale sp.
Cultivar. "TAMcale 6331". PVP 200600008. Pedigree - TSW2507/NE87T149//NE86T665.

The following were developed by Margaret Pooler, USDA, ARS, U.S. National Arboretum, 3501 New York Avenue, NE, Washington, District of Columbia 20002, United States. Received 12/21/2005.

PI 641803. Syringa x hyacinthiflora Rehder
Cultivar. NA 62974. Pedigree - Syringa 'Sweet Charity' X Syringa x hyacinthiflora 'Pocahontas'. Rounded habit, dark blue-purple flowers.

PI 641804. Syringa x hyacinthiflora Rehder
Cultivar. NA 62975. Pedigree - Syringa 'Sweet Charity' X Syringa x hyacinthiflora 'Pocahontas'. Upright habit, large reddish-purple inflorescences.

The following were donated by USDA, ARS, U.S. Sugarcane Field Station, Meridian, Mississippi, United States. Received 1983.

PI 641805. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 1; MN 316; FC 16158; Grif 14872; ALBOUGH.

PI 641806. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 2; MN 239; IS 608; FC 13575; Grif 14873; 65I 2095; AMES AMBER.

PI 641807. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 282; IS 671; MN 3; FC 9112; REG (ASA) 61; 65I 2217; TS 10475; Grif 14874; ATLAS. Pedigree - Blackhull Kafir x Sourle.

PI 641808. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 5; FC 8708; Grif 14875; CLUBHEAD.

PI 641809. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 658; MN 6; FC 16159; REG (ASA) 52; Grif 14876; COLMAN (M).

PI 641810. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 269; IS 659; MN 46; REG NO 52; FC 13350; Grif 14877; COLMAN (Y).

PI 641811. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 270; FC 2324; REG NO 52; Grif 14878; COLMAN.

PI 641812. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 271; SA 214; REG NO 52; Grif 14879; COLMAN.

PI 641813. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 279; IS 668; MN 7; FC 13618; Grif 14881; COWPER.

PI 641814. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 254; MN 8; IS 645; FC 9097; 65I 1894; Grif 14882; EARLY FOLGER.

PI 641815. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 647; MN 9; IS 8008; MN 256; FC 16154; 74L 12084; REG (ASA) 59; Grif 14883; EARLY FOLGER.

PI 641816. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 646; MN 255; SA 21; 65I 1895; Grif 14884; EARLY FOLGER.

PI 641817. Sorghum bicolor (L.) Moench **subsp. bicolor**
"EARLY SUMAC"; MN 293; MN 10; IS 622; TS 8720; FC 6611; REG (ASA) 44; Grif 14885.

PI 641818. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 320; MN 11; FC 16165; Grif 14886; GOOSENECK.

PI 641819. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 690; MN 322; TS 28213; 65I 2103; REG NO 57; Grif 14887; GOOSENECK.

PI 641820. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 319; MN 12; IS 685; FC 6605; 65I 1992; Grif 14888; HONEY.

PI 641821. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 313; MN 13; FC 16164; Grif 14889; HONEY DRIP.

PI 641822. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 610; MN 14; FC 16152; Grif 14890; INDIANA AMBER.

PI 641823. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 311; MN 15; IS 679; FC 16163; 65I 1921; Grif 14891; JONES.

PI 641824. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 657; MN 16; MN 266; REG (ASA) 51; FC 9108; 65I 1021; Grif 14892; KANSAS ORANGE.

PI 641825. Sorghum bicolor (L.) Moench **subsp. bicolor**
"LEOTI"; MN 250; MN 17; IS 639; REG (ASA) 58; FC 6610; Grif 14893.

PI 641826. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 640; MN 251; SA 259; REG NO 58; Grif 14894; LEOTI.

PI 641827. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 240; MN 18; IS 609; FC 16153; 65I 1175; Grif 14895; MAZO AMBER.

PI 641828. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 252; MN 19; FC 13439; Grif 14896; MCLEAN.

PI 641829. Sorghum bicolor (L.) Moench **subsp. bicolor**
"MCLEAN"; IS 644; MN 253; FC 16183; REG (ASA) 62; Grif 14897.

PI 641830. Sorghum bicolor (L.) Moench **subsp. bicolor**
"MINNESOTA AMBER"; MN 20; IS 606; FC 16151; REG (ASA) 46; Grif 14898. Pedigree - Selection from Early Amber.

PI 641831. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 607; MN 238; SA 17; 65I 2094; REG NO 46; Grif 14899; MINNESOTA AMBER.

PI 641832. Sorghum bicolor (L.) Moench **subsp. bicolor**
"ORANGE"; MN 265; MN 21; IS 655; REG (ASA) 50; SA 20; Grif 14900.

PI 641833. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 381; Grif 14901; ORANGE.

PI 641834. Sorghum bicolor (L.) Moench **subsp. bicolor**
"PLANTER"; IS 675; MN 22; MN 285; FC 16156; REG (AGA) 56; 66I 4558; Grif 14902.

PI 641835. Sorghum bicolor (L.) Moench **subsp. bicolor**
"REX"; MN 317; MN 23; IS 684; IS 8016; FC 16185; REG (ASA) 63; 65I 2179 ; 5033; 65I 1991; Grif 14903; RED X. Pedigree - Selected from natural cross found in Link Hybrid (Sapling) and Amber sorgos.

PI 641836. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 654; MN 25; FC 13640; Grif 14904; ROX ORANGE.

PI 641837. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 663; MN 274; FC 13614; 65I 1897; Grif 14905; SACCALINE.

PI 641838. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 664; MN 275; FC 13498; 65I 1898; Grif 14906; SACCALINE.

PI 641839. Sorghum bicolor (L.) Moench **subsp. bicolor**
"SOURLESS"; MN 28; FC 9111; REG (ASA) 54; TS 8718; Grif 14908.

PI 641840. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 29; MN 277; IS 666; FC 13490; Grif 14909; STRAIGHTNECK.

PI 641841. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 667; MN 278; FC 16160; 65I 1900; Grif 14910; STRAIGHTNECK.

PI 641842. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 51; SA 287-C; Grif 14911; STRAIGHTNECK. Pedigree - Selection made at Meridian, Mississippi from SA 287 (MN 44) in 1939. A strain of Straightneck. Red-brown seed; red, loose glumes.

PI 641843. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 52; SA 287-S; Grif 14912. Pedigree - Selection made at Meridian, Mississippi from SA 287 (MN 44) in 1939. Red glumes, red-brown seed, starchy endosperm.

PI 641844. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 30; MN 314; FC 16162; 65I 1906; Grif 14913; SILVER TOP.

PI 641845. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 315; SA 24; Grif 14914; SILVER TOP.

PI 641846. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 601; MN 4513; ISABELA NO 10000; Grif 14915; BLACK AMBER.

PI 641847. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 624; MN 4517; FC 1712; REG NO 43; Grif 14916; SUMAC.

PI 641848. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 312; MN 32; FC 16167; Grif 14917; TEXAS SEEDED RIBBON.

PI 641849. Sorghum bicolor (L.) Moench **subsp. bicolor**
"WACONIA"; MN 33; MN 246; IS 613; FC 16205; 5125; REG (ASA) 47; 5025; 65I 2098; Grif 14918.

PI 641850. Sorghum bicolor (L.) Moench **subsp. bicolor**
"WHITE AFRICAN"; MN 34; IS 669; FC 6604; TS 1921; REG (ASA) 60; Grif 14919.

PI 641851. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 35; SA 107; Grif 14920. Pedigree - (Blackhull kafir x Sumac) x Sumac.

PI 641852. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 36; MN 300; IS 626; SA 108; 65I 2512; Grif 14921; SUMAC 108. Pedigree - (Blackhull kafir x Sumac) x Sumac.

PI 641853. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 38; 5003; SA 169; Grif 14923. Pedigree - White African x Sumac.

PI 641854. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 40; 5004; SA 173; Grif 14924. Pedigree - White African x Sumac.

PI 641855. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 41; SA 182; Grif 14925. Pedigree - White African x Orange.

PI 641856. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 42; MN 308; SA 183; Grif 14926. Pedigree - White African x Honey.

PI 641857. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 43; MN 309; SA 186; Grif 14927. Pedigree - White African x Honey.

PI 641858. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 707; MN 45; IS 8001; 65I 2121; Grif 14928; COLLIER.

PI 641859. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 648; MN 257; FC 2333; 65I 2115; REG NO 64; Grif 14929; COLLIER.

PI 641860. Sorghum bicolor (L.) Moench **subsp. bicolor**
"COLLIER"; IS 650; MN 259; REG (ASA) 64; FC 16184; 5027; 65I 2117; Grif 14930.

PI 641861. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 714; Grif 14931; COLLIER. Plume type, heavy stalks.

PI 641862. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 715; Grif 14932; COLLIER.

PI 641863. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 47; Grif 14933; GEORGIA BLUE RIBBON. Brown seed, reddish-black glumes.

PI 641864. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 325; MN 48; Grif 14934; HODO.

PI 641865. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 49; Grif 14935; ICEBERG.

PI 641866. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 656; MN 267; SA 308; 65I 1885; Grif 14936; ICEBERG ORANGE.

PI 641867. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 370; Grif 14937; ICEBERG REED.

PI 641868. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 371; Grif 14938; ICEBERG - STATE COLLEGE.

PI 641869. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 50; Grif 14939; C.P. SPECIAL.

PI 641870. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 53; Grif 14940; CLUB KAFIR. Pedigree - Selected in 1919 from Dawn Kafir for high yield.

PI 641871. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 58; Grif 14941; WESTERN BLACKHULL.

PI 641872. Sorghum bicolor (L.) Moench **subsp. bicolor**
"WESTERN BLACKHULL KAFIR"; IS 181; MN 108; FC 9098; REG (ASA) 14; Grif 14942.

PI 641873. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 73; SA 299; Grif 14943; JUICY FETERITA.

PI 641874. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 78; IS 340; CIso 959; Grif 14944; DAY MILO. Pedigree - CI 480 x 332-187.

PI 641875. Sorghum bicolor (L.) Moench **subsp. bicolor**
"TEXAS MILO"; MN 89; IS 356; SA 368; TS 25243-338; REG (ASA) 83; Grif 14945. Pythium resistant.

PI 641876. Sorghum bicolor (L.) Moench **subsp. bicolor**
"EARLY WHITE MILO"; IS 362; MN 92; REG (ASA) 30; FC 5886; TS 1926; 66I 4777; Grif 14946.

PI 641877. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 363; MN 93; REG NO 30; 66I 4778; FC 8966; Grif 14947; EARLY WHITE MILO.

PI 641878. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 103; CI 340; Grif 14948; DAWN KAFIR.

PI 641879. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 179; MN 105; SA 213; Grif 14949; SANTA FE KAFIR.

PI 641880. Sorghum bicolor (L.) Moench **subsp. bicolor**
"DWARF BLACKHULL KAFIR"; MN 106; IS 178; CIso 204; 65I 2226; REG (ASA) NO 13; Grif 14950.

PI 641881. Sorghum bicolor (L.) Moench **subsp. bicolor**
"REED KAFIR"; MN 113; IS 191; IS 192; TS 6824; CIso 628; FC 11574; 5126; REG (ASA) 18; 65I 2172; 65I 2228; Grif 14951.

PI 641882. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 840; MN 149; FC 16181; Grif 14952; QUADROON.

PI 641883. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 171; LA 1938-124; Grif 14953. Pedigree - Club x (Wheatland x Dwarf Yellow Milo).

PI 641884. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 177; FC 16177; Grif 14954. Pedigree - Blackhull Kafir x Pink Kafir.

PI 641885. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 52; MN 217; 66I 4687; SA 208; Grif 14955; CALIFORNIA WHITE DURRA.

PI 641886. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 243; SA 309; Grif 14957; DAKOTA AMBER SORGO.

PI 641887. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 244; FC 13613; Grif 14958; BATHURST SUMAC.

PI 641888. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 619; MN 245; 65I 2102; SA 18; Grif 14959; BATHURST SUMAC.

PI 641889. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 248; SA 19; 5026; Grif 14960; CLUBHEAD.

PI 641890. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 677; MN 249; 65I 1903; SA 306; Grif 14961; CLUBHEAD.

PI 641891. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 272; SA 312; 5028; Grif 14962; FREMONT SORGO.

PI 641892. Sorghum bicolor (L.) Moench **subsp. bicolor**
"SAPLING"; IS 662; MN 273; FC 16157; REG (ASA) 55; Grif 14963.

PI 641893. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 676; MN 288; 65I 1902; FC 11694; Grif 14966; DWARF ASHBURN.

PI 641894. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 290; FC 9500; Grif 14967; DWARF EARLY SUMAC.

PI 641895. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 292; IS 621; SA 338; 5031; Grif 14969; MEDIUM DWARF SUMAC.

PI 641896. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 305; SA 171; Grif 14970. Pedigree - White African x Sumac.

PI 641897. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 318; FC 9101; 5034; Grif 14971; EARLY HONEY.

PI 641898. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 323; Grif 14972; CUBAN SEEDED RIBBON.

PI 641899. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 366; Grif 14974; GOLD MEDAL.

PI 641900. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 369; Grif 14975; SUMAC NICHOLSON.

PI 641901. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 379; Grif 14976; HONEY DRIP.

PI 641902. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 380; Grif 14977; KANSAS SOURLESS ORANGE.

PI 641903. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 385; Grif 14978; HONEY DEW DRIP.

PI 641904. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 429; Grif 14979; H.C. 41-13. Pedigree - Leoti x Atlas. White seed, Leoti type, waxy endosperm, high sugar.

PI 641905. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 430; H.C. 40-17; Grif 14980. Pedigree - Leoti x Atlas. White seed, Atlas type, waxy endosperm.

PI 641906. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 431; 5036; H.C. 39-142; Grif 14981. Pedigree - Leoti x Club. Grain type, waxy endosperm.

PI 641907. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 713; 704 H; Grif 14982. Plume type, heavy stalks.

PI 641908. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 1169; Grif 14984; White Meresse. Collected 02/26/1946 in Sudan. Southern Sudan. Grain sorghum.

PI 641909. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 1170; Grif 14985; Red Losinga. Collected 02/26/1946 in Sudan. Southern Sudan.

The following were collected by Department of Agriculture, Nairobi, Nairobi Area, Kenya. Donated by USDA, ARS, U.S. Sugarcane Field Station, Meridian, Mississippi, United States. Received 1983.

PI 641910. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 1180; Grif 14986; Mingawa. Collected 02/28/1946 in Nairobi Area, Kenya.

The following were donated by USDA, ARS, U.S. Sugarcane Field Station, Meridian, Mississippi, United States. Received 1983.

PI 641911. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 1194; Wild Sorghum; Grif 14987.

PI 641912. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 1197; Grif 14988; MUTAN. Collected 02/28/1946 in Kenya. Near Nairobi. Light red, brown glumes.

PI 641913. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 1284; Zande (sweet sorghum); Grif 14989.

PI 641914. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 1285; Grif 14990.

PI 641915. Sorghum bicolor (L.) Moench **subsp. bicolor**
MN 1357; Grif 14991; Williams.

PI 641916. Sorghum bicolor (L.) Moench **subsp. bicolor**
IS 359; MN 2677; Chinch Bug Resistant Milo; Grif 14992.

The following were developed by Texas Agricultural Experiment Station, Texas, United States; Ball Horticultural Company, West Chicago, Illinois, United States. Received 10/20/2005.

PI 641917 PVPO. Helenium amarum (Raf.) H. Rock
Cultivar. "DAKOTA GOLD". PVP 200600009.

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Salvia azurea var. grandiflora (639178)
Secale cereale subsp. cereale (636689, 639328, 639334, 639336-639337, 639353, 639356, 639366, 639372, 639376, 639379, 639383, 639393, 639402, 639409, 639418, 639428, 639439)
Sesamum indicum (639028-639032)
Shepherdia argentea (641697)
Solanum jamesii (641029)
Solanum lycopersicum (638513, 638679, 639734-639735, 641773, 641791)
Solanum lycopersicum var. lycopersicum (639206-639219)
Solanum melongena (639112-639125)
Solanum soestii (639276)
Solanum stoloniferum (641027-641028, 641030-641040)
Solanum tuberosum (639034-639036, 639202-639205)
Sorghum bicolor subsp. bicolor (636763, 639512-639514, 639702-639720, 641805-641916)
Spergula arvensis (641698)
Spiraea blumei (641699)
Staphylea bumalda (641700)
Stipa lessingiana (636666)
Stipa sibirica (639809)
Syringa x hyacinthiflora (641803-641804)
Thinopyrum hybrid (639725-639726)

Thinopyrum junceum (636521-636522)
Thinopyrum ponticum (636523)
Trifolium alpestre (641338-641339, 641345, 641460)
Trifolium ambiguum (641368-641374, 641568, 641663, 641674)
Trifolium andersonii (641521)
Trifolium angustifolium (636445, 641712)
Trifolium apertum (636446)
Trifolium aureum (636447-636448)
Trifolium calcaricum (641356)
Trifolium campestre (636449-636450, 641713-641714)
Trifolium canescens (641453-641454, 641468)
Trifolium erubescens (639954)
Trifolium fragiferum (641340, 641354-641355, 641366, 641444)
Trifolium haussknechtii (636451)
Trifolium heldreichianum (641335-641336)
Trifolium hirtum (641715-641716)
Trifolium hybridum (641367)
Trifolium incarnatum (636452-636453)
Trifolium isthmocarpum (641717-641720)
Trifolium longipes (641431)
Trifolium lupinaster (641520)
Trifolium medium (641341-641342, 641357-641361, 641475, 641567, 641624, 641626)
Trifolium michelianum (641721)
Trifolium montanum (641617)
Trifolium ochroleucum (641337, 641343)
Trifolium pannonicum (641344)
Trifolium plumosum (641534)
Trifolium pratense (638505, 638509, 639690, 641420-641421, 641426, 641522-641523, 641525, 641564, 641604, 641608, 641611, 641618, 641621)
Trifolium pratense var. sativum (641456)
Trifolium repens (636765, 641346, 641362, 641455, 641524, 641526, 641529)
Trifolium repens var. biasolettii (641363-641364)
Trifolium rubens (641365)
Trifolium scabrum (641722)
Trifolium spadiceum (641723-641725)
Trifolium stoloniferum (641565-641566)
Trifolium striatum (636454, 641726-641728)
Trifolium trichocephalum (641473)
Trifolium velebiticum (641625)
Trifolium wormskioldii (641429-641430, 641527)
Trigonella foenum-graecum (639185)
Tripsacum dactyloides (639522)
Trisetum spicatum (636545)
Triticum aestivum subsp. aestivum (636458, 636470-636471, 636754, 637779, 638512, 638521, 638535-638537, 638554-638592, 638620-638656, 638697, 638715-638718, 638738-638740, 638742, 638790, 639058-639097, 639106-639108, 639177, 639227-639233, 639242, 639273, 639289, 639295, 639303-639304, 639306-639308, 639310-639312, 639314-639315, 639318-639319, 639321-639323, 639325-639327, 639330-639331, 639333, 639338-639340, 639342, 639348-639350, 639352, 639354-639355, 639358-639364, 639367, 639369-639370, 639374-639375, 639377-639378, 639380-639382, 639384-639387, 639389-639392, 639394, 639397-639399, 639401, 639405, 639408, 639410-639411, 639413-639414, 639416-639417, 639419-639421, 639424, 639426-639427, 639429-639433, 639435-639438, 639441-639443, 639445, 639447-639448, 639450-639460, 639462-639470, 639472-639495, 639506-639507, 639687, 639724, 639729, 639736-639739,

639907, 639921-639924, 639951-639953, 640424-640431, 641164-641168, 641220-641221, 641729-641765, 641772, 641778, 641786-641787)
Triticum aestivum subsp. compactum (636459)
Triticum turgidum subsp. durum (636498-636501, 638698, 638726, 638741, 639290, 639471, 639697-639701, 639869, 639877-639884, 639886-639888, 641222-641223)
Vaccinium angustifolium (638380, 638479)
Vaccinium arboreum (638760-638761)
Vaccinium arctostaphylos (638757, 638776)
Vaccinium boreale (638381)
Vaccinium caesariense (638743)
Vaccinium cespitosum (638338, 638359, 638374-638375, 638503)
Vaccinium corymbosum (638379, 638455-638464, 638745, 638748, 638764-638765, 641328-641329, 641331, 641333)
Vaccinium cylindraceum (638781)
Vaccinium darrowii (638325-638326, 638382, 641334)
Vaccinium deliciosum (638340)
Vaccinium elliottii (638383)
Vaccinium exul (638362)
Vaccinium hirtum (638749, 638772)
Vaccinium hybrid (638324, 638328-638337, 638763, 638767-638768, 641330)
Vaccinium macrocarpon (638753-638754, 638756, 638766)
Vaccinium membranaceum (638388, 638497, 638499, 638501, 638782)
Vaccinium myrtilloides (638384-638385)
Vaccinium myrtillus (638478, 638774, 638785)
Vaccinium myrtoides (638373)
Vaccinium ovalifolium (638339, 638370, 638403-638425, 638483, 638488, 638498, 638500, 638502, 638750, 638758)
Vaccinium ovatum (638496, 638783)
Vaccinium oxycoccos (638349-638350, 638352, 638357, 638360-638361, 638368, 638465-638477, 638486, 638755, 638770, 638778, 641319-641327)
Vaccinium pallidum (638746-638747)
Vaccinium parvifolium (638784)
Vaccinium praestans (638426-638442, 638481-638482, 638485, 638490, 638495)
Vaccinium scoparium (638376-638377)
Vaccinium smallii (638372, 638391-638402, 638480, 638484, 638487, 638489, 638491-638493)
Vaccinium sp. (638371, 638387, 638390, 638744, 638751, 638775)
Vaccinium tenellum (638386)
Vaccinium uliginosum (638327, 638341, 638343-638348, 638351, 638353, 638355, 638364-638367, 638378, 638443-638454, 638752, 638777)
Vaccinium varingifolium (638389)
Vaccinium virgatum (638759, 641332)
Vaccinium vitis-idaea (638342, 638354, 638356, 638358, 638363, 638369, 638494, 638762, 638769, 638771, 638773, 638779-638780)
Vigna mungo (636475)
Vigna radiata (641766)
Vigna unguiculata (641077-641078)
Vigna unguiculata subsp. unguiculata (638657, 639259-639263, 641079-641083)
X Aegilotriticum sp. (639730-639732)
X Triticosecale sp. (636690, 639098-639105, 641801-641802)
Zea mays (636457, 636476-636489, 636764, 638699-638714, 639111, 639515-639519, 639685-639686, 639906, 639919)
Zea mays subsp. mays (636493, 636502-636503, 638549-638553, 638594, 639037-639056, 639497-639505, 639925-639950, 641007-641025, 641061-641076, 641224-641266, 641709-641711)