



Plant Inventory No. 217

Plant Materials Introduced in 2008
(Nos. 652416 - 655520)



Foreword

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The following were collected by Carlos R. Spehar, EMBRAPA-Cerrados, C. Postal 08223, CEP 73301-970, Planaltina, Federal District, Brazil. Received 11/20/1996.

PI 652416. *Amaranthus hybridus* L.

Wild. CPAC 96-1; Ames 23369. Collected 10/1996 in Goias, Brazil. Latitude 16° 13' S. Longitude 47° 55' W. Elevation 900 m. Soybean field near Luziania. Upright.

PI 652417. *Amaranthus hybridus* L.

Wild. CPAC 96-2; Ames 23370. Collected 10/1996 in Goias, Brazil. Latitude 16° 13' S. Longitude 47° 55' W. Elevation 900 m. Soybean field near Luziania. Upright.

PI 652418. *Amaranthus hybridus* L.

Wild. CPAC 96-3; Ames 23371. Collected 10/1996 in Goias, Brazil. Latitude 16° 13' S. Longitude 47° 55' W. Elevation 900 m. Soybean field near Luziania. Upright.

PI 652419. *Amaranthus quitensis* Kunth

Wild. CPAC 96-4; Ames 23372. Collected 10/1996 in Goias, Brazil. Latitude 16° 13' S. Longitude 47° 55' W. Elevation 900 m. Soybean field near Luziania. Upright.

PI 652420. *Amaranthus hybrid*

Wild. CPAC 96-5; Ames 23373. Collected 10/1996 in Goias, Brazil. Latitude 16° 13' S. Longitude 47° 55' W. Elevation 900 m. Soybean field near Luziania. Pedigree - Mixed characters of *Amaranthus hybridus* and *A. quitensis*. Upright with pink flower.

PI 652421. *Amaranthus quitensis* Kunth

Wild. CPAC 96-6; Ames 23374. Collected 10/1996 in Goias, Brazil. Latitude 16° 13' S. Longitude 47° 55' W. Elevation 900 m. Soybean field near Luziania. Upright with red flower.

PI 652422. *Amaranthus quitensis* Kunth

Wild. CPAC 96-7; Ames 23375. Collected 10/1996 in Goias, Brazil. Latitude 16° 13' S. Longitude 47° 55' W. Elevation 900 m. Soybean field near Luziania. Upright with red flower.

PI 652423. *Amaranthus quitensis* Kunth

Wild. CPAC 96-8; Ames 23376. Collected 10/1996 in Goias, Brazil. Latitude 16° 13' S. Longitude 47° 55' W. Elevation 900 m. Soybean field near Luziania. Upright with red flower.

PI 652424. *Amaranthus quitensis* Kunth

Wild. CPAC 96-9; Ames 23377. Collected 10/1996 in Federal District, Brazil. Latitude 15° 38' S. Longitude 47° 39' W. Elevation 1000 m. Millet field near Planaltina. Upright with pink flower.

PI 652425. *Amaranthus hybrid*

Wild. CPAC 96-10; Ames 23378. Collected 10/1996 in Federal District, Brazil. Latitude 15° 38' S. Longitude 47° 39' W. Elevation 1000 m. Millet field near Planaltina. Pedigree - Characteristics of *Amaranthus hybridus* and *A. quitensis*. Upright with pink flower.

- PI 652426. *Amaranthus quitensis* Kunth**
 Wild. CPAC 96-11; Ames 23379. Collected 10/1996 in Federal District, Brazil. Latitude 15° 38' S. Longitude 47° 39' W. Elevation 1000 m. Millet field near Planaltina. Upright with pink flower.
- PI 652427. *Celosia argentea* var. *plumosa* Voss**
 Wild. CPAC 96-13; Ames 23381. Collected 10/1996 in Federal District, Brazil. Latitude 15° 38' S. Longitude 47° 39' W. Elevation 1000 m. Millet field near Planaltina. Upright with red flower.
- PI 652428. *Amaranthus quitensis* Kunth**
 Wild. CPAC 96-14; Ames 23382. Collected 10/1996 in Federal District, Brazil. Latitude 15° 38' S. Longitude 47° 39' W. Elevation 1000 m. Millet field near Planaltina. Upright with red flower.
- PI 652429. *Amaranthus quitensis* Kunth**
 Wild. CPAC 96-15; Ames 23383. Collected 10/1996 in Federal District, Brazil. Latitude 15° 38' S. Longitude 47° 39' W. Elevation 1000 m. Millet field near Planaltina. Upright with red flower.
- PI 652430. *Amaranthus quitensis* Kunth**
 Wild. CPAC 96-16; Ames 23384. Collected 10/1996 in Federal District, Brazil. Latitude 15° 38' S. Longitude 47° 39' W. Elevation 1000 m. Millet field near Planaltina. Upright with red flower.
- PI 652431. *Amaranthus* hybrid**
 Wild. CPAC 96-17; Ames 23385. Collected 10/1996 in Federal District, Brazil. Latitude 15° 54' S. Longitude 47° 0' W. Elevation 950 m. Soybean field near PAD-DF (Planned Settlement for the Federal District consisting of farms of nearly 500-600 acres which are part of a cooperative). Pedigree - Characteristics of *Amaranthus quitensis* and *A. hybridus*. Upright with red flower.
- PI 652432. *Amaranthus hypochondriacus* L.**
 Wild. CPAC 96-18; Ames 23386. Collected 10/1996 in Federal District, Brazil. Latitude 15° 45' S. Longitude 47° 52' W. Elevation 1000 m. Roadside near Brasilia. Upright.
- PI 652433. *Amaranthus blitum* L.**
 Wild. CPAC 96-19; Ames 23387. Collected 10/1996 in Federal District, Brazil. Latitude 15° 45' S. Longitude 47° 52' W. Elevation 1000 m. Dump area near Brasilia. Decumbent with indehiscient fruit.
- PI 652434. *Amaranthus viridis* L.**
 Wild. CPAC 96-20; Ames 23388. Collected 10/1996 in Minas Gerais, Brazil. Latitude 15° 27' S. Longitude 46° 35' W. Elevation 800 m. Garden near Burity. Decumbent with indehiscient fruit.

The following were collected by H. Hubatsch, Botanischer Garten, Universitat Leipzig, Linnestrasse 1, Leipzig, Saxony D-04103, Germany; Kurt Hubatsch, Botanischer Garten, Universitat Leipzig, Linnestrasse 1, Leipzig, Saxony D-04103, Germany. Donated by Botanischer Garten, Universitat Leipzig, Linnestrasse 1, Leipzig, Saxony D-04103, Germany. Received 09/03/1997.

PI 652435. *Amaranthus retroflexus* L.

Index Seminum 22; Ames 23890. Collected 1997 in Veneto, Italy. Latitude 45° 46' N. Longitude 10° 48' E. Malcesine.

PI 652436. *Amaranthus hybridus* L.

Index Seminum 23; Ames 23891. Collected 1997 in Czech Republic. Srbsko.

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 652437. *Fragaria ananassa* Duchesne ex Rozier *ananassa nothosubsp. ananassa*

Wild. *F. yezoensis* J66; HD-2004-66; CFRA 1860; *F. ananassa* escape J66. Collected 07/18/2004 in Hokkaido, Japan. Latitude 43° 39' 17" N. Longitude 143° 9' 54" E. Elevation 1070 m. old mercury pit parking lot on provincial route 39. Pedigree - Collected in the wild from Hokkaido, Japan.

PI 652438. *Fragaria nipponica* Makino

Wild. *F. yezoensis* J77; HD-2004-77; CFRA 1867. Collected 07/20/2004 in Hokkaido, Japan. Latitude 43° 19' 29" N. Longitude 145° 37' 17" E. Elevation 1 m. Tanneuna Marsh along both sides of path to marsh. open sun. Pedigree - Collected in the wild from Hokkaido, Japan.

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; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Nahla V. Bassil, USDA, ARS, National Clonal 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 01/02/2008.

PI 652439. *Fragaria hybrid*

Cultivar. *F. nipponica* hybrid J66 Octoploid; CFRA 1929; HD-2004-66 SG#1. Pedigree - Octoploid seedling selection collected from eastern part of Hokkaido, Japan. Seed was germinated at Corvallis, Oregon. Seedling grown from seedlot collected by Kim Hummer and Tom Davis from Segioku Pass region of Hokkaido. Originally thought to be *F. nipponica* (*F. yezoensis*), but, shown to be octoploid. This plant was tested for ploidy through flow cytometry in 2007 and shown to have 4x the amount of the control diploid indicating that it is octoploid. This seedling was the only one to germinate from the seedlot that was collected in Hokkaido in 2004. The seedling has pubescent petioles, and pubescent abaxial and adaxial leaf surfaces.

The following were developed by 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; Xianming Chen, USDA-ARS, WSU - Wheat Genetics Unit, PO Box 646430, Pullman, Washington 99164-6430, United States; Don Obert, USDA-ARS, 1691 S. 2700 W., Aberdeen, Idaho 83210, United States; Eric Jackson, USDA-ARS, 1691 S 2700 W, Aberdeen, Idaho 83210, United States; C.P. Evans, USDA-ARS, Small Grains and Potato Research Facility, 1691 South 2700 West, Aberdeen, Idaho 83210, United States; J.M. Windes, University of Idaho, Idaho Falls Research and Extension Center, 1776 Science Center Drive, Idaho Falls, Idaho 83402, United States. Received 01/09/2008.

PI 652440. *Hordeum vulgare* L. subsp. *vulgare*

Cultivar. Pureline. "LENETAH"; 01Ab11107; NSGC 18828. CV-338. Pedigree - 94Ab12981 / 91Ab3148. Expanded: 94Ab12981 = 85Ab2323/Camas; 85Ab2323 = 79Ab19042/Crystal; 79Ab19042 = Klages/Hector; 91Ab3148 = Gallatin/Targhee//Bowman. Released 2007. Two-rowed spring barley. Lenetah was publicly released in December 2007 due to its superior yield across Idaho, but especially in north Idaho, and under dryland conditions. It was evaluated in the three north Idaho counties of Lewis, Nez Perce, and Latah, and was thus named for these three counties. Lenetah is very similar to Baronesse, Tetonia, and Spaulding for height and straw strength. Lenetah, Baronesse, and Tetonia head on average 2 d earlier than Spaulding. Lenetah has a moderately lax spike which nods at maturity. The spike has smooth awns, long rachilla hairs, glume hairs that are banded, and glume awns equal in length to the glume. Laterals are sterile with a barbed apex. The kernel has white aleurone, veins with few barbs, and a crease that is open to slightly flaring. The hull is adhering, slightly wrinkled, tending to smooth. The rachis is glabrous to very few hairs. Lenetah is easily distinguished from Baronesse, Tetonia, and Spaulding by the fact that all except Lenetah have rough awns. Lenetah is susceptible to field races of *P. striiformis*. The incidence of barley stripe rust in Idaho is rare, and when present, losses have been insignificant.

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; T.B. Brenneman, University of Georgia, Coastal Plain Experiment Station, Dept. of Plant Pathology, Tifton, Georgia 31793-0748, United States. Received 01/08/2008.

PI 652441. *Arachis hypogaea* L. subsp. *hypogaea*

Cultivar. Pureline. "GEORGIA-07W". CV-102; PVP 200800248. Pedigree - C-99R x Georgia Green. Large-seeded runner market type peanut with no flowers on the mainstem, alternate branching patterns, prostrate or runner growth habit, profuse branching and two-seed pods. Has an indeterminate fruiting pattern. Distinctively different from C-99R in having a medium vs. late maturity profile. Matures 2 weeks earlier than C-99R in south Georgia. Has darker green leaf color than Georgia Green and has a tan vs. pink testa color. Similar to C-99R in pod and seed size. Similar to Georgia Green in maturity, blanchability, oil content and excellent roasted peanut flavor. During 2004-06 when averaged over 14 tests at multilocations in Georgia, Georgia-07W found to be significantly ($P < 0.05$) lower in TSWV incidence and total disease

(TD) incidence highest in pod yield, total sound mature kernel (TSMK) grade, and dollar value return per hectare compared to Georgia Green and C-99R. During past 2 years at multilocations in Georgia when planted early (mid-April) to increase TSWV disease pressure, among lowest in TSWV incidence and TD incidence, highest in pod yield, TSMK grade, and dollar value return per hectare compared to 17 and 21 other runner genotypes in 2005-06. During 2004-2007 in field trials conducted at a site with long-term history of high white mold disease pressure, found to be significantly ($P < 0.05$) lower in white mold incidence and higher in pod yield than resistant parental check cultivar, C-99R.

The following were developed by David A. Sleper, University of Missouri, Department of Agronomy, 271-F Life Sciences Center, Columbia, Missouri 65211, United States. Received 01/07/2008.

PI 652442. *Glycine max* (L.) Merr.

Breeding. Pureline. SS93-6012. GP-362. Pedigree - SS93-6012 and SS93-6181 (both MGIII) were developed from a cross between MO/PSD-0259 (PI 562694) (PSD-resistant MGIV cultivar) and Asgrow 3834 (PSD-susceptible MGIII cultivar) in 1990 at the Bradford Research and Extension Center (BREC), Columbia, Missouri. MO/PSD-0259 (PI 562694) is essentially a composite of 11 lines that resulted from the cross between PI 417479 x Merschman Dallas made at Columbia, MO in 1984 and was registered as PSD-resistant germplasm in 1993. The F1 and F3 generations were grown during the winters of 1990/91 and 1991-92 in Puerto Rico, respectively, while the remaining generations were grown at the BREC, Columbia, Missouri. SS93-6012 has a relative maturity of 4.2 with purple flowers and grey pubescence with an indeterminate growth habit, tan pods at maturity, with yellow color seeds with buff hila and with 100 seed weight of ~14g. SS93-6181 has a relative maturity of 4.0 with purple flowers and tawny pubescence with an indeterminate growth habit, tan pods at maturity, with yellow color seeds with imperfect black hila and with 100 seed weight of ~16g. SS93-6012 and SS93-6181 both highly resistant to Phomopsis seed decay caused by Phomopsis spp. but both are susceptible to soybean cyst nematode (caused by Heterodera glycines) and Phytophthora root rot (caused by Phytophthora sojae). SS93-6012 is highly resistant and SS93-6181 is susceptible to frog-eye leaf spot (caused by Cercospora sojae).

PI 652443. *Glycine max* (L.) Merr.

Breeding. Pureline. SS93-6181. GP-363. Pedigree - SS93-6012 and SS93-6181 (both MGIII) were developed from a cross between MO/PSD-0259 (PI 562694) (PSD-resistant MGIV cultivar) and Asgrow 3834 (PSD-susceptible MGIII cultivar) in 1990 at the Bradford Research and Extension Center (BREC), Columbia, Missouri. MO/PSD-0259 (PI 562694) is essentially a composite of 11 lines that resulted from the cross between PI 417479 x Merschman Dallas made at Columbia, MO in 1984 and was registered as PSD-resistant germplasm in 1993. The F1 and F3 generations were grown during the winters of 1990/91 and 1991-92 in Puerto Rico, respectively, while the remaining generations were grown at the BREC, Columbia, Missouri. SS93-6012 has a relative maturity of 4.2 with purple flowers and grey pubescence with an indeterminate growth habit, tan pods at maturity, with yellow color seeds with buff hila and with 100 seed weight of ~14g. SS93-6181 has a relative maturity of 4.0 with purple flowers and tawny pubescence with an indeterminate growth habit, tan pods at maturity, with yellow color seeds with imperfect black hila and

with 100 seed weight of ~16g. SS93-6012 and SS93-6181 both highly resistant to Phomopsis seed decay caused by Phomopsis spp. but both are susceptible to soybean cyst nematode (caused by Heterodera glycines) and Phytophthora root rot (caused by Phytophthora sojae). SS93-6012 is highly resistant and SS93-6181 is susceptible to frog-eye leaf spot (caused by Cercospora sojae).

The following were developed by Debra Ann Inglis, Washington State University, NW WA Research and Extension Unit, 1468 Memorial Highway, Mt. Vernon, Washington 98273, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Clare Coyne, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Kevin E. McPhee, Washington State University, Crop & Soil Science Department, Johnson 305, Pullman, Washington 99164-6420, United States; Niklaus J. Grunwald, USDA, ARS, Irrigated Agricultural Research, & Extension Center, Prosser, Washington 99350, United States; Lyndon Porter, USDA, ARS, ARS Pathologist, 24106 North Bunn Road, Prosser, Washington 99350-9687, United States. Donated by Clare Coyne, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 03/30/2005.

PI 652444. Pisum sativum L.

Breeding. RIL 846_34; W6 26740. GP-96. Pedigree - F8 derived inbred line from DPS X 90-2131. Improved resistance to Fusarium root rot over tolerant parent 90-2131 = PI 557502.

PI 652445. Pisum sativum L.

Breeding. RIL 846_40; W6 26743. GP-97. Pedigree - F8 derived inbred line from DPS X 90-2131. Improved resistance to Fusarium root rot over tolerant parent 90-2131 = PI 557505.

PI 652446. Pisum sativum L.

Breeding. RIL 847_36; W6 26745. GP-98. Pedigree - F8 derived inbred line from DPS X 90-2131. Improved resistance to Fusarium root rot over tolerant parent 90-2131 = PI 557507.

The following were developed by Nunhems BV, Netherlands. Received 12/31/2007.

PI 652447 PVPO. Citrullus lanatus (Thunb.) Matsum. & Nakai

Cultivar. "PIXIE". PVP 200800054.

PI 652448 PVPO. Citrullus lanatus (Thunb.) Matsum. & Nakai

Cultivar. "POLIMAX". PVP 200800061.

The following were developed by Seminis Vegetable Seeds, Inc., Woodland, California, United States. Received 12/17/2007.

PI 652449 PVPO. Pisum sativum L.

Cultivar. "XP 08530727". PVP 200800041.

The following were developed by University of Georgia Research Foundation, Inc., Athens, Georgia, United States. Received 01/08/2008.

PI 652450 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "8641"; GA96229-3A41. PVP 200800004. Pedigree - 881130/2*881582.

PI 652451 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "USG 3295"; GA951395-3E25. PVP 200800005. Pedigree - GA87110/VA93-52-55//GA88151.

PI 652452 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "AGS 2031"; GA951395-3A31. PVP 200800006. Pedigree - GA87110/VA93-52-55//GA88151.

The following were developed by Muhammad Ashraf, University of Agriculture, Dept. of Botany, Faisalabad, Pakistan. Received 01/09/2008.

PI 652453 QUAR. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. S-24. Pedigree - LU26S (from Pakistan) x Kharchia (from India). Dark green leaves, larger grain size with golden brown color, and semi-dwarf growth habit. Tested under saline conditions and compared with its parents and some other known salt tolerant and salt sensitive cultivars to access the extent of improvement of salt tolerance. Highest in seed yield and other yield and growth variables of all six lines (S24, S36 (selected salt tolerant lines) U26S, Kharchia (parents), SARCI (salt tolerant line, developed by Saline Agricultural Research Cell, Univ. of Agric., Faisalabad, Pakistan), Potohar (salt sensitive line from Pakistan) examined. At Bangor (UK) Pritchard found that high salt tolerance of S24 was associated with its considerably high K⁺/Na⁺ ratio.

The following were developed by Jerald W. Bergman, Montana State University, Eastern Agricultural Research Center, 1501 North Central, Sidney, Montana 59270, United States. Received 01/09/2008.

PI 652454. *Carthamus tinctorius* L.

Cultivar. Pureline. "MONDAK"; 95B7446. PVP 200800066. Pedigree - Derived from a single F6 plant selection of a cross between the high linoleic Montana breeding line 89B1312 and a high oleic safflower variety Montola 2000. Recurrent selection for high oleic fatty acid composition, Alternaria leaf spot resistance, high test weight and greater plant height was practiced in the breeding of MonDak. Gas chromatography determinations for oil quality were made each generation to select for an oleic fatty acid (C18:1) oil composition of over 80%. Flower color is yellow in the bloom stage with an occasional orange fresh flower (<1/10,000). Flower color is orange in the wilt stage. Plants are spiny with spines on the tip along margins of the leaves and involucre bracts. Seeds have a predominantly white normal hull with occasional white hull seed with dark blotches (<1/1,000). These variants are commercially acceptable.

PI 652455. *Carthamus tinctorius* L.

Cultivar. Pureline. "CARDINAL"; 95B3538. PVP 200800065. Pedigree - Derived from a single F4 plant selection in 1995 from a cross of a high linoleic safflower breeding line 89B2414 having Alternaria leaf spot resistance x safflower variety Finch. Recurrent selection for Alternaria

leaf spot resistance, high test weight, greater plant height, and high linoleic fatty acid composition was practiced in the breeding of Cardinal. Gas chromatograph determinations were made each generation to select for a linoleic fatty acid composition of over 78%. Developed to provide a variety with improved disease resistance to *Alternaria* leaf spot and improved yielding ability for the northern Great Plains states. Provides a high test weight, normal white hull safflower variety for the specialty birdseed market and a high linoleic safflower oil for the specialty high linoleic safflower oil markets. Flower color is yellow in the bloom stage and yellow in the wilt stage with an occasional orange color flower at the wilt stage (1/1,000). Seeds have a predominately white normal hull with occasional white hull seed with dark blotches (<1/1,000). These variants are commercially acceptable. Plants are spiny with spines on the tip and along the margins the leaves and involucral bracts.

The following were developed by Frederic L. Kolb, University of Illinois, Department of Crop Sciences, 1102 S. Goodwin Avenue, Urbana, Illinois 61801, United States. Received 01/17/2008.

PI 652456. *Avena sativa* L.

Cultivar. Pureline. "BUCKSKIN"; IL99-1338. PVP 200800072. Pedigree - AC Assiniboia/IL 92-6728. AC Assiniboia is a cultivar released from Agriculture and Agri-Food Canada (AAFC), and IL92-6728 is a breeding line from the University of Illinois program with the pedigree IL86-5262 (Mo. 06425/IL75-1264(Otee/Noble) //IL81-3097(IL75-5743/Larry) /IL88-14752 (IL81-2570(IL75-1062 (Coker 227//Clintford/Portal) /P7135A1-1-8-4)/ND820603). Buckskin is a variety released by the University of Illinois Agricultural Experiment Station. Buckskin has been very high yielding in tests in Illinois and throughout the spring oat growing region. Test weight of Buckskin is very good. Buckskin is a midseason variety. Bucksin is 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. Buckskin is susceptible to loose smut (*Ustilago avenae* (Pers.) Rostr.). Buckskin has tan seed, and most seed of Buckskin fluoresce in ultraviolet light; however, some kernels do not fluoresce, and 0.5% nonfluorescent seeds are allowed in Buckskin. Buckskin is about two days later than Ogle and is about the same height as Ogle. Lodging resistance of Buckskin is similar to Ogle or somewhat lower than Ogle under high fertility. Recognized classes of seed of Buckskin are Foundation and Certified. Buckskin will be a Title V protected variety. Buckskin was evaluated in the Uniform Midseason Oat Performance Nursery in 2004 and 2005. Buckskin ranked fourth for yield in the Uniform Midseason Performance Oat Nursery in 2004, and second in 2005. Buckskin yielded 10 bu/A more than Ogle over 14 locations in 2004, and 14 bu/A more than Ogle over 13 locations in 2005. Averaged over 49 tests in Illinois and throughout the spring oat growing region, Buckskin yielded 8.2 bu/A more than Ogle (126.3 bu/A for Buckskin compared to 118.1 bu/A for Ogle).

PI 652457. *Avena sativa* L.

Cultivar. Pureline. "TACK"; IL97-9853. PVP 200800073. Pedigree - IL91-7730 (IL86-5698/ND 863145) / P8710801-18. Tack is a variety released by the University of Illinois Agricultural Experiment Station. Tack (evaluated as experimental breeding line IL97-9783) has had good

yield and excellent test weight over a broad range of environments in tests in Illinois. Tack has very good yield potential, outstanding test weight and good barley yellow virus tolerance and crown rust resistance. The outstanding feature of Tack is its exceptionally high test weight. Test weight of Tack has been several pounds higher than varieties currently grown in Illinois. Tack is a midseason variety with heading date one to two days earlier than Spurs. Tack is usually about one inch taller than Spurs. Lodging resistance of Tack is similar to Spurs, but somewhat less than Jay. Tack is 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. Tack is susceptible to loose smut (*Ustilago avenae* (Pers.) Rostr.). Tack has tan seed, and most seed of Tack fluoresce in ultraviolet light; however, some kernels do not fluoresce, and 0.5% nonfluorescent seeds are allowed in Tack. Averaged over 20 tests in Illinois, Tack yielded 8.1 bu/A more than Ogle (133.6 bu/A for Tack compared to 125.5 bu/A for Ogle). Measured over ten locations in Illinois the test weight of Tack averaged 36.7 lbs/bu compared to 31.2 lbs/bu for Ogle and 34.2 lbs/bu for Spurs.

The following were developed by Syngenta Seeds, Inc., Nampa, Idaho, United States. Received 01/10/2008.

PI 652458 PVPO. *Lactuca sativa* L.
Cultivar. "LUCAN". PVP 200800051.

PI 652459. *Lactuca sativa* L.
Cultivar. "TOMOS". PVP 200800067.

The following were developed by Hazera Genetics, Israel. Received 01/09/2008.

PI 652460 PVPO. *Lactuca sativa* L.
Cultivar. "LINOY". PVP 200800062.

The following were developed by Jacklin Seed Company, Post Falls, Idaho, United States. Received 08/07/2007.

PI 652461 PVPO. *Lolium perenne* L.
Cultivar. "REVENGE GLX". PVP 200700452.

The following were developed by Seminis Vegetable Seeds, Inc., Woodland, California, United States. Received 01/14/2008.

PI 652462 PVPO. *Solanum lycopersicum* L.
Cultivar. "FDS 14-2081". PVP 200800038.

The following were developed by DLF International Seeds, Halsey, Oregon, United States. Received 01/17/2008.

PI 652463 PVPO. *Poa pratensis* L.
Cultivar. "KATIE". PVP 200800030.

PI 652464 PVPO. *Poa pratensis* L.
Cultivar. "VALOR". PVP 200800031.

The following were developed by Enza Zaden Beheer B.V., Netherlands. Received 01/17/2008.

PI 652465 PVPO. *Valerianella locusta* (L.) Laterr.
Cultivar. "ACCENT". PVP 200800032.

The following were developed by Progeny Advanced Genetics, Inc., Salinas, California, United States. Received 01/17/2008.

PI 652466 PVPO. *Lactuca sativa* L.
Cultivar. "DECLARATION". PVP 200800040.

PI 652467 PVPO. *Lactuca sativa* L.
Cultivar. "INDEPENDENCE". PVP 200800048.

The following were developed by Rutgers, The State University of New Jersey, New Jersey, United States; Blue Moon Farms, Lebanon, Oregon, United States. Received 01/17/2008.

PI 652468 PVPO. *Poa pratensis* L.
Cultivar. "A96-3123". PVP 200800049.

The following were developed by Enza Zaden Beheer B.V., Netherlands. Received 01/17/2008.

PI 652469 PVPO. *Lactuca sativa* L.
Cultivar. "AUBURN". PVP 200800050.

The following were developed by Seed Research of Oregon, Inc., Corvallis, Oregon, United States; Rutgers, The State University of New Jersey, New Jersey, United States. Received 01/17/2008.

PI 652470 PVPO. *Festuca rubra* L. subsp. *rubra*
Cultivar. "SR-5250". PVP 200800053.

The following were developed by Enza Zaden Beheer B.V., Netherlands. Received 01/17/2008.

PI 652471 PVPO. *Lactuca sativa* L.
Cultivar. "WINDSOR". PVP 200800055.

The following were developed by Florida Agricultural Experiment Station, Florida, United States. Received 01/17/2008.

PI 652472 PVPO. *Paspalum notatum* Flugge
Cultivar. "UF-Riata". PVP 200800057.

The following were developed by Central Valley Seeds, Inc., United States. Received 01/17/2008.

PI 652473 PVPO. *Lactuca sativa* L.
Cultivar. "SWEETHEART". PVP 200800058.

PI 652474 PVPO. *Lactuca sativa* L.
Cultivar. "HEARTBREAKER". PVP 200800059.

PI 652475 PVPO. *Lactuca sativa* L.
Cultivar. "SUN VALLEY". PVP 200800060.

The following were developed by North Dakota State University, Fargo, North Dakota 58105, United States. Received 01/17/2008.

PI 652476 PVPO. *Avena sativa* L.
Cultivar. Pureline. "SOURIS". PVP 200800063. Pedigree - ND90141/ND900118.

The following were developed by Basin Seed Company, Nampa, Idaho, United States. Received 01/17/2008.

PI 652477 PVPO. *Phaseolus vulgaris* L.
Cultivar. "ELIMINATOR". PVP 200800064.

The following were developed by Paragon Seed, Inc., United States. Received 01/17/2008.

PI 652478 PVPO. *Lactuca sativa* L.
Cultivar. "NAUTILUS". PVP 200800068.

The following were developed by Ball Horticultural Company, West Chicago, Illinois, United States. Received 01/17/2008.

PI 652479 PVPO. *Myosotis sylvatica* Hoffm.
Cultivar. "MON AMIE BLUE". PVP 200800070.

The following were developed by Wisconsin Alumni Research Foundation, University of Wisconsin, Madison, Wisconsin, United States. Received 12/04/2007.

PI 652480 PVPO. *Solanum tuberosum* L.
Cultivar. "WHITE PEARL"; WI355-1. PVP 200200251.

The following were developed by Brian T. Scully, USDA-ARS, Crop Protection and Management Res. Unit, P.O. Box 748, Tifton, Georgia 31793-0748, United States. Received 01/23/2008.

PI 652481. *Zoysia japonica* Steud.
Cultivar. "PRISTINEFLORA"; "PRISTINE"; BA-305. Plant Patent 18,415P3; CV-251. Pedigree - This cultivar originated as an open pollinated

progeny derived from Emerald , an interspecific cross between *Zoysia japonica* (Stued.) and *Zoysia tenuifolia* (L.) Merr. Pristine was first identified and selected as BA-305 in Palm Beach County, Florida. Pristine (BA-305) was an individual plant selected from an array of nine lines chosen to represent the variability of off-types growing in an original planting of Emerald. The purpose of this breeding program was to identify an alternative to the standard cultivar Emerald, and to potentially enlarge the diversity of turf cultivars grown in Florida's specialty zoysiagrass market. Pristine was developed as a regional variety for the subtropical and tropical regions of Florida. It was originally tested as breeding line BA-305, and Plant Patent 18,415 P3 was issued on Jan. 15, 2008 under said designation. Pristine was selected for two horticultural traits, including darker leaf color and a more refined leaf structure. Additionally, Pristine was selected for two agronomic traits, including a faster rate of crop establishment and reduced seed head production. Leaf color was determined using the Munsell Color Chart, and Pristine produced a fresh leaf color that ranged from 7.5GY (4/6) to 7.5GY (5/6). It also produced leaves that averaged 21% shorter and 19% narrower than the standard variety Emerald. Agronomically, Pristine produced fewer seed heads and had a short peak-duration of seed head production in comparison to Emerald. Pristine exhibited a faster rate of crop establishment and typically covered the plots two (2) months earlier than the standard cultivar.

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; Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; David Ramming, USDA, ARS, Horticultural Crops Research Laboratory, 2021 South Peach Avenue, Fresno, California 93727, United States. Donated by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 07/26/1990.

PI 652482. *Lonicera caerulea* L.

Cultivar. "Bluebird"; CLON 2. Collected in Russian Federation. Developed in Former Soviet Union. Pedigree - Selection of wild blue honeysuckle from Kamchatka Selection was made in VIR at St. Petersburg, Russian Federation. One of the three first blue honeysuckle cultivars developed at St. Petersburg VIR station. This cultivar was released in 1980. At that time the breeding program was at its initial stages. The three cultivars that were named were the best F1 and F2 seedlings of native collected wild blue honeysuckle from the Kamchatka Peninsula. Genetically uniform from a limited gene pool was available for the crosses that were made. M. N. Plekhanova. 2000. Blue honeysuckle (*Lonicera caerulea* L.) ercial berry crop for temperate climate: genetic resources and breeding. *Acta Hort.* 538:159-164. Medium vigor plant, upright growing to 5 to 6' tall, large, long, dark blue sweet tasting berries. - One Green World Catalog 2005.

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; Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333,

United States; David Ramming, USDA, ARS, Horticultural Crops Research Laboratory, 2021 South Peach Avenue, Fresno, California 93727, United States. Developed by VIR Experiment Station, Tomsk, Tomsk, Russian Federation. Donated by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 07/26/1990.

PI 652483. *Lonicera caerulea* L.

Cultivar. "Tomichka"; CLON 3. Collected in Russian Federation. Pedigree - Selection of subsp. *edulis* selection made in Vladivostok, Russian Federation. Cultivar bore fruit 1 year from cutting at Pavlovsky

A moderately vigorous bush with a spreading habit.

Grows to 4 to 5' height by about the same in diameter. Bears a good crop of roundish, deep blue berries. - One Green World Catalog.

PI 652484. *Lonicera caerulea* L.

Cultivar. "Goluboye Verentino"; USSR 90-18-18; Fonysoe Capetemo Vertemo Blue; Golooboy Verentino; CLON 4. Collected in Russian Federation.

Pedigree - Probably F2 seedlings of wild blue honeysuckle from the Kamchatka Peninsula, Russian Federation.

The following were donated by George A. White, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616, United States. Received 01/23/1992.

PI 652485. *Lonicera caerulea* var. *edulis* Turcz. ex Herder

Uncertain. CLON 6. Pedigree - Selection of *L. caerulea* var. *emphyllocalyx*. Tetraploid.

PI 652486. *Lonicera caerulea* var. *edulis* Turcz. ex Herder

Uncertain. CLON 7. Pedigree - Selection of *L. caerulea* var. *edulis*. Diploid.

PI 652487. *Lonicera caerulea* var. *edulis* Turcz. ex Herder

Uncertain. CLON 8. Pedigree - Selection of *L. caerulea* var. *edulis*. Tetraploid.

PI 652488. *Lonicera caerulea* var. *dependens* (Regel ex Dippel) Rehder

Uncertain. CLON 9. Pedigree - Selection of *L. caerulea*. Tetraploid.

PI 652489. *Lonicera caerulea* var. *altaica* Pall.

Uncertain. CLON 11. Pedigree - Selection of *Lonicera caerulea* var. *altaica*. Tetraploid.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Sheng Ke Xi, The Chinese Academy of Forestry, Beijing, Beijing, China; Qinghua Zhang, Institute of Forest Ecology and Environment, Chinese Academy of Forestry, Wan Shou Shan, Beijing, Beijing

100091, China. Donated by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 10/24/1996.

PI 652490. *Lonicera caerulea* var. *edulis* Turcz. ex Herder
Wild. 96008; CLON 13. Collected in China. Pedigree - Selection of *Lonicera caerulea* var. *edulis*.

PI 652491. *Lonicera caerulea* var. *edulis* Turcz. ex Herder
Wild. 96060; CLON 14. Collected in China. Pedigree - Selection of *L. caerulea* var. *edulis*.

The following were donated by Maria Plenkhanova, N.I. Vavilov Institute of Plant Industry, 44 Herzen Street, Department of Fruit Crops, Leningrad, Leningrad 190000, Russian Federation; Sergey Alexanian, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation. Received 02/08/2002.

PI 652492. *Lonicera caerulea* var. *edulis* Turcz. ex Herder
Cultivar. CLON 18. Pedigree - Selection of *Lonicera caerulea*.

PI 652493. *Lonicera caerulea* var. *edulis* Turcz. ex Herder
Cultivar. CLON 19. Pedigree - Selection of *L. caerulea* subsp. *kamchatka*.

PI 652494. *Lonicera caerulea* var. *edulis* Turcz. ex Herder
Cultivar. CLON 21. Pedigree - Selection of *L. caerulea* subsp. *kamchatka*.

PI 652495. *Lonicera caerulea* var. *edulis* Turcz. ex Herder
Cultivar. CLON 22. Pedigree - Selection of *L. caerulea* subsp. *kamchatka*.

PI 652496. *Lonicera caerulea* var. *edulis* Turcz. ex Herder
Cultivar. CLON 23. Pedigree - Selected from the wild on Iturup Island, Russian Federation.

PI 652497. *Lonicera caerulea* var. *edulis* Turcz. ex Herder
Cultivar. CLON 25. Pedigree - Selection of *L. caerulea* subsp. *kamchatka*.

PI 652498. *Lonicera caerulea* var. *edulis* Turcz. ex Herder
Cultivar. CLON 26. Pedigree - Selection of *L. caerulea* subsp. *kamchatka*.

PI 652499. *Lonicera caerulea* var. *edulis* Turcz. ex Herder
Cultivar. CLON 29. Pedigree - Selection of *L. caerulea* subsp. *kamchatka*.

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 652500. *Lonicera caerulea* var. *edulis* Turcz. ex Herder
Wild. 18-2002; CLON 31. Collected 08/2002 in Khabarovsk, Russian Federation. Elevation 0 m. On island 8 km below bridge across the Burea River. Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

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 652501. *Lonicera caerulea* var. *villosa* (Michx.) Torr. & A. Gray
Uncertain. CLON 33. Collected 09/09/2003 in Quebec, Canada. Latitude 51° 31' 32" N. Longitude 58° 27' 2" W. Elevation 0 m. Goose pond near Blanc Sablon. Pedigree - Collected from the wild in Canada.

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 652502. *Lonicera caerulea* L.
Wild. AS-03-034; CLON 35. Collected 08/06/2003 in Sakhalin, Russian Federation. Latitude 44° 47' 48" N. Longitude 147° 11' 34" E. Elevation 10 m. Iturup Island, at the foot of Atsonupuri Volcano, north seaward bay. Pedigree - Collected from the wild in Sakhalin, Russian Federation. on Atsunupuri Volcano, Iturup.

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 652503. *Lonicera caerulea* var. *edulis* Turcz. ex Herder
Wild. *L. caerulea* var. *emphylocalyx* J01; HD-2004-01; CLON 37. Collected 07/09/2004 in Hokkaido, Japan. Latitude 42° 37' 59" N. Longitude 141° 43' 17" E. Elevation 107 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. &P> 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 652504. *Lonicera caerulea* var. *edulis* Turcz. ex Herder
Wild. *L. caerulea* var. *emphylocalyx* J02; HD-2004-02; CLON 38.
Collected 07/09/2004 in Hokkaido, Japan. Latitude 43° 17' 24" N.
Longitude 141° 51' 15" E. Elevation 107 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. &P> 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 donated by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 11/05/2004.

- PI 652505. *Lonicera caerulea* L.**
Cultivar. "Tetryevskaya"; CLON 41. Pedigree - Selection of *L. caerulea*.
- PI 652506. *Lonicera caerulea* var. *edulis* Turcz. ex Herder**
Cultivar. "Zarnitsa"; CLON 42. Pedigree - Selection of *L. caerulea* var. *edulis*.
- PI 652507. *Lonicera caerulea* var. *kamtschatica* Sevast.**
Cultivar. "Berry Blue"; CLON 43. Pedigree - Selection of *L. caerulea* made in Czech Republic.
- PI 652508. *Lonicera caerulea* var. *edulis* Turcz. ex Herder**
Cultivar. "Ivooshka"; CLON 44. Pedigree - Selection of *L. caerulea* var. *edulis*.
- PI 652509. *Lonicera caerulea* var. *kamtschatica* Sevast.**
Cultivar. "Zolooshka"; CLON 45. Pedigree - Selection of *L. caerulea*.
- PI 652510. *Lonicera caerulea* L.**
Cultivar. "Nina #9"; CLON 46. Pedigree - Selection of *L. caerulea*.
- PI 652511. *Lonicera caerulea* var. *edulis* Turcz. ex Herder**
Cultivar. "Kapel"; CLON 47. Pedigree - Selection of *L. caerulea* var. *edulis*.
- PI 652512. *Lonicera caerulea* L.**
Cultivar. "Magadan"; CLON 48. Pedigree - Selection of *L. caerulea* var. *edulis*.

PI 652513. *Lonicera caerulea* var. *kamtschatica* Sevast.
Cultivar. "Dessertnaya"; CLON 49. Pedigree - Selection of *L. caerulea* var. *kamchatika*.

PI 652514. *Lonicera caerulea* var. *kamtschatica* Sevast.
Cultivar. "Kamchadalka"; CLON 50. Pedigree - Selection of *L. caerulea* var. *kamchatika*.

PI 652515. *Lonicera caerulea* var. *edulis* Turcz. ex Herder
Cultivar. "F1-9-58"; CLON 51. Pedigree - Selection of *L. caerulea*.

PI 652516. *Lonicera caerulea* L.
Cultivar. "Dimka"; CLON 52. Pedigree - Selection of *L. caerulea* var. *edulis*.

PI 652517. *Lonicera caerulea* var. *edulis* Turcz. ex Herder
Cultivar. "Blue Velvet"; CLON 53. Pedigree - Selection of *L. caerulea*.

PI 652518. *Lonicera caerulea* L.
Cultivar. "Gerda"; CLON 54. Pedigree - Selection of *L. caerulea*.

The following were developed by Edward Zurawicz, Research Institute of Pomology and Floriculture, W. Pomologiczna 18, P.O. Box 105, Skierniewice, Skierniewice 96-100, Poland. Donated by David Brazelton, Fall Creek Farm and Nursery, Inc., 39318 Jasper-Lowell Road Road, Lowell, Oregon 97452, United States. Received 05/01/1997.

PI 652519. *Aronia melanocarpa* (Michx.) Elliott
Cultivar. "Nowa Wies"; CARO 6. Germplasm from North America to Poland to Artemis Internation to Fall Creek Nursery to NCGR - Corvallis.

PI 652520. *Aronia melanocarpa* (Michx.) Elliott
Cultivar. "Nero"; CARO 7. Germplasm from North America to Poland to Artemis Internation to Fall Creek Nursery to NCGR - Corvallis.

PI 652521. *Aronia melanocarpa* (Michx.) Elliott
Cultivar. "Egerta"; CARO 8. Germplasm from North America to Poland to Artemis Internation to Fall Creek Nursery to NCGR - Corvallis.

PI 652522. *Aronia melanocarpa* (Michx.) Elliott
Cultivar. "Albigowa"; CARO 9. Germplasm from North America to Poland to Artemis Internation to Fall Creek Nursery to NCGR - Corvallis.

PI 652523. *Aronia melanocarpa* (Michx.) Elliott
Cultivar. "Dabrowice"; CARO 10. Germplasm from North America to Poland to Artemis Internation to Fall Creek Nursery to NCGR - Corvallis.

PI 652524. *Aronia melanocarpa* (Michx.) Elliott
Cultivar. "Kutno"; CARO 11. Germplasm from North America to Poland to Artemis Internation to Fall Creek Nursery to NCGR - Corvallis.

The following were donated by Raintree Nursery, 391 Butts Road, Merton, Washington 98356, United States. Received 03/10/2005.

PI 652525. *Aronia melanocarpa* (Michx.) Elliott
Cultivar. "Viking"; CARO 12.

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 652526. *Amelanchier ovalis* Medik.
Uncertain. A. ovalis 42204; CAME 84. Pedigree - Uncertain. Improvement status unspecified.

The following were developed by USDA, ARS, NCRPIS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Donated by Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 08/19/1992.

PI 652527. *Amelanchier alnifolia* (Nutt.) Nutt. ex M. Roem.
Cultivated. CAME 98. Pedigree - Increase seed of PI 303168. Originally collected in Colorado. 92nc303168ai01SD.

PI 652528. *Amelanchier sanguinea* (Pursh) DC.
Breeding. A. sanguinea Ames 4179; CAME 102. Pedigree - Increase seed of Ames 4179, Originally collected wild in MI. Reference Ames 4179, CAME 79.

The following were donated by Peter Del Tredici, Arnold Arboretum of Harvard University, 125 Arborway, Jamaica Plain, Massachusetts 02130-3500, United States. Received 03/2002.

PI 652529. *Amelanchier ovalis* Medik.
AA 18-2002; NA 71681. Collected in Volgograd, Russian Federation. Pedigree - Selection of wild species.

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. Charchoghlian, 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 652530. *Amelanchier ovalis* Medik.
Wild. A. ovalis ARM-02-144; ARM-02-144; CAME 107. Collected 09/09/2002 in Armenia. Latitude 40° 28' 59" N. Longitude 45° 19' 15" E. Elevation 2101 m. Daranak Valley, Gegharkunik Marz. Coppiced hillside with *Sorbus* spp., *Rubus saxatilis* and *Berberis vulgaris*. Pedigree - Collected from the wild in Armenia.

The following were donated by Edible Landscaping, 361 Spirit Ridge Lane, Afton, Virginia 22920, United States. Received 11/30/2004.

PI 652531. *Amelanchier lamarckii* F. G. Schroed.

Cultivated. CAME 229; *A. lamarckii* (*grandiflora*). Pedigree - *A. arborea* x *A. laevis* - natural hybrid. From catalog. Natural hybrid between *A. arborea* (woodland Saskatoon) and *A. laevis* (Allegheny Juneberry). Has more flowers than its parents and the fruits are larger and more succulent. The unfolding leaves are purplish. More upright than spreading with a trunk instead of many stolons. USDA zones 5 - 8. Edible Landscaping (ediblelandscaping.com) 2004.

The following were donated by Forest Farm Nursery, 990 Tetherow Road, Williams, Oregon 97544-9599, United States. Received 12/28/2004.

PI 652532. *Amelanchier spicata* (Lam.) K. Koch

Cultivated. Running Serviceberry; CAME 230. Pedigree - *A. canadensis* x *A. stononifera* - natural hybrid. Sweet and juicy juneberries may be found on this shrub, noted especially for its low to 4' slowly spreading habit. NCGR clone obtained from Forest Farm in Williams, Oregon in 2004. Forest Farm received from Appalachian Nursery in Waynsboro, Pennsylvania. -- R. Pragg, 2005.

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; Karen A. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 402, BARC-West, Beltsville, Maryland 20705-2350, United States; Jerry A. Payne, Wildlife Biology Department, Rt. 5, Box 180, Forsyth, Georgia 31029, 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 09/23/1997.

PI 652533. *Amelanchier obovalis* (Michx.) Ashe

Wild. NC 96-2-6; CAME 231; *A. obovalis* NC 96-2-6. Collected 05/03/1996 in North Carolina, United States. Latitude 34° 15' 34" N. Longitude 78° 28' 39" W. Elevation 22 m. Lake Waccamaw State Park, Columbus county. Pocosin type vegetation, around woods edges of parking lot.

The following were donated by Harlene Hatterman-Valenti, North Dakota State University, Department of Plant Sciences, 266D Loftsgard Hall, Fargo, North Dakota 58105-5051, United States; St. Lawrence Nurseries, 325 State Highway #345, Potsdam, New York 13676, United States. Received 06/02/2005.

PI 652534. *Amelanchier alnifolia* (Nutt.) Nutt. ex M. Roem.

Cultivar. "Honeywood"; CAME 233. Collected in Saskatchewan, Canada. Pedigree - Selection from wild plant originally collected near Parkside Saskatchewan, Canada. Origin near Parkside, Saskatchewan by A. J. Porter. seedling selection from wild plant discovered by A. J. Porter about 1955 near his Honeywood Nursery, introduced by him in 1973. Flowers 4 to 8 days later than other cultivars, and ripens somewhat later also. Fruit up to 16 mm diameter, basically flattened to spherical, blue-black with little bloom; typically 9 to 15 per cluster, cluster

fairly tight, fairly even ripening, excellent full and tangy flavor; pH 3.7 to 3.9; seeds large. Shrub to 5 m high; initially upright to arching-spreading, 4 m spread at maturity; sparse suckering near crown, crown expands slowly like Pembina. May have some resistance to leaf spot and powdery mildew. Very productive and precociously fruitful. - The Brooks and Olmo Register of Fruit and Nut Varieties. APS Press. 1997. p. 667.

PI 652535. *Amelanchier alnifolia* (Nutt.) Nutt. ex M. Roem.

Cultivar. "Thiessen"; CAME 240. Collected in Saskatchewan, Canada. Pedigree - Selected from the wild west of Hepburn Saskatchewan, Canada. Origin west of Hepburn, Saskatchewan (52 degrees N), near the North Saskatchewan River; wild plant discovered in 1906 by Maria Loewen and transplanted to her parents farm near Debenham. Years later removed to their farm near Langham, Saskatchewan. Obtained from this farm and introduced by G. Krahn (Lakeshore Tree Farms, Saskatoon, Saskatchewan) in 1976. Flowers a few days earlier than other cultivars. Fruit up to 17 mm diameter, nearly spherical, blue-black with slight bloom; typically 6 to 1 per cluster, cluster fairly loose, uneven ripening; excellent flavor, fresh and juicy. Shrub to 5 m high; initially upright, but tends to sprawl from an early age, eventually becoming a large bush, up to 6 m spread at maturity; moderate to good suckering near crown, crown expands indefinitely; crown long-lived 70+ years. Hardy to zone 1. Some resistance to powdery mildew. It is much favored for U-pick orchards. It had the second largest commercial hectareage in Canada in 1993. Winner of the Canadian Society for Horticultural Science Outstanding Cultivar Award in 1994. - The Brooks and Olmo Register of Fruit and Nut Varieties. APS Press 1997. p. 668.

The following were collected by Wayne Crowder, USDA, ARS, Washington State University, Plant Materials Center, Pullman, Washington 99164-6211, United States. Developed by Wayne Crowder, USDA, ARS, Washington State University, Plant Materials Center, Pullman, Washington 99164-6211, United States. Received 12/18/2006.

PI 652536. *Amelanchier alnifolia* (Nutt.) Nutt. ex M. Roem. var. *alnifolia*
Cultivar. WC-39; "Newport"; 9033548; T33548; CAME 241; 33548. Collected 08/09/1982 in Washington, United States. Latitude 48° 8' 7" N. Longitude 117° 10' 9" W. Elevation 650 m. Near Diamond Lake, along US Highway 2; Northwest quarter, section 6, Township 30N, Range 45E, Willamette Meridian. Pend Oreille county. Ponderosa pine, Douglas fir, snowberry.

The following were donated by St. Lawrence Nurseries, 325 State Highway #345, Potsdam, New York 13676, United States. Received 04/11/2007.

PI 652537. *Amelanchier hybrid*
Cultivar. "Success"; CAME 243.

PI 652538. *Amelanchier alnifolia* (Nutt.) Nutt. ex M. Roem.
Cultivar. "Forestburg"; CAME 244.

Unknown source. Received 06/11/2007.

PI 652539. *Amelanchier arborea* (F. Michx.) Fernald
Wild. HDF-2007-053; *A. arborea* HDF-2007-053; CAME 245. Collected
06/06/2007 in Alabama, United States.

Unknown source. Received 06/11/2007.

PI 652540. *Amelanchier laevis* Wiegand
Wild. HDF-2007-027; *A. arborea* HDF-2007-027; CAME 246. Collected
06/04/2007 in South Carolina, United States.

Unknown source. Received 07/15/2007.

PI 652541. *Amelanchier alnifolia* (Nutt.) Nutt. ex M. Roem.
Wild. HDF-2007-105; *A. alnifolia* HDF-2007-105; CAME 247. Collected
07/11/2007 in South Dakota, United States.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm
Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States.
Received 08/31/2001.

PI 652542. *Empetrum nigrum* L.
Wild. HVSC-94; CEMP 7. Collected 08/18/2001 in Khabarovsk, Russian
Federation. Elevation 16 m. Located 4 km north of Vanino at camp 19.
Flat sphagnum bog with 80% exposure. Associated with *Rubus chamaemorus*,
Larches, *Vaccinium uliginosum*, *V. vitis idaea* and *V. oxycoccus*.
Pedigree - Collected from the wild in Khabarovsk, Russian Federation.

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 652543. *Empetrum nigrum* L.
Wild. GE-2004-064; CEMP 8. Collected 09/29/2004 in Georgia. Latitude
42° 39' 48" N. Longitude 44° 35' 54" E. Elevation 2417 m.
Mtiuleti (Mtskheta-Mtianeti) province, near Gergeti Holy Trinity Church.
Sub-alpine meadows growing with *Daphne glomerata*, *Rhododendron*
caucasicum, *Vaccinium vitis-idaea* and *V. myrtillus* on windswept slopes.
Pedigree - Collected from the wild in the Republic of Georgia.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small
Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United
States; James Luby, University of Minnesota, Department of Horticultural
Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States; Herb
Hoover, University of Minnesota, St. Paul, Minnesota, United States; Rick

Harrison, University of Minnesota, Department of Horticultural Science, 1970 Folwell Avenue, St. Paul, Minnesota 55108-6007, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 08/31/1993.

PI 652544. *Gaultheria shallon* Pursh

Wild. CGAU 30. Collected 08/08/1993 in Washington, United States. Latitude 47° 45' N. Longitude 122° 56' W. Elevation 457 m. T26N R2W SE1/4 Sec. 4 & NW1/4 Sec. 9; Olympic Nat'l Forest 3.2 km w/sw of US 101 on FR 2620. Site wandered along road. Some fruit collected from fairly old clearcut along road. Moist coastal forest.

PI 652545. *Gaultheria shallon* Pursh

Wild. CGAU 31. Collected 08/08/1993 in Washington, United States. Latitude 48° N. Longitude 123° W. Elevation 15 m. T31N R4W Sec. 27 & 33; Dungeness Recreation Area. Along trail on top of sandstone bluffs along St. of Juan de Fuca. Very sandy area, appears to be typical coastal/beach environment.

The following were collected by Donna Rae McKay, USDA Forest Service, Forest Resources Bldg, Corvallis, Oregon 97331, United States. Received 03/19/1998.

PI 652546. *Gaultheria shallon* Pursh

Wild. CGAU 33. Collected 11/1986 in Oregon, United States.

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 652547. *Gaultheria humifusa* (Graham) Rydb.

Wild. DC2001-4; CGAU 34. 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, *Rubus pedatus*, *Vaccinium* sp., partial shade. Pedigree - Collected from the wild in Oregon.

The following were donated by Baldassare Mineo, Siskiyou Rare Plant Nursery, 2825 Cummings Road, Medford, Oregon 97501, United States. Received 12/10/2003.

PI 652548. *Gaultheria borneensis* Stapf

Uncertain. *G. borneensis*; CGAU 35; 39090.

PI 652549. *Gaultheria nummularioides* D. Don

Uncertain. *G. nummularioides*; CGAU 36; 39210.

PI 652550. *Gaultheria pyroloides* Hook. f. & Thomson ex Miq.

Uncertain. *G. miqueliana*; CGAU 37; 39160.

The following were collected by Norman Pellett, University of Vermont, Dept. Plant and Soil Sci., Burlington, Vermont 05401, United States. Received 08/28/2006.

PI 652551. Gaultheria hispidula (L.) Muhl.

Wild. CGAU 39; *G.hispidula* - Mt. Mansfield. Collected 08/24/2006 in Vermont, United States.

Unknown source. Received 08/08/1996.

PI 652552. Potentilla villosa Pall. ex Pursh

Wild. KHCW 96-15-01; CPOT 14; CPOT 1. Collected in Alaska, United States. Latitude 57° 38' N. Longitude 152° 15' 11" W. Elevation 12 m. Brinker Point on Chiniak Bay, extension of Twin Creeks Beach. Plants growing on cliffs overlooking the bay. Pedigree - open pollinated *Potentilla villosa*.

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 652553. Potentilla villosa Pall. ex Pursh

Wild. 1FRA; CPOT 15; AG 452. Collected 09/22/2000 in Alaska, United States. Latitude 52° 40' 37" N. Longitude 174° 1' 49" E. Elevation 0 m. Shemya Island, east of Attu Island (western most portion of the Aleutian Islands). Pedigree - Collected from the wild in Alaska.

The following were collected by Umesh Srivastava, NBPGR, New Delhi, Delhi, India; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 East Alisal Street, Salinas, California 93905, United States; Jack E. Staub, USDA, ARS, University of Wisconsin, Department of Horticulture, Madison, Wisconsin 53706, United States. Donated by James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 East Alisal Street, Salinas, California 93905, United States. Received 03/04/1993.

PI 652554. Citrullus colocynthis (L.) Schrad.

Uncertain. USM 218; Grif 14202; Ames 20632. Collected 10/22/1992 in Rajasthan, India. Collected from not specified during the rainy season. Near Bhopalsar east of Bikaner, Dungargargh-Ratangargh Road (NH-11), in Churu district, Rajasthan state, India. Site:022.

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

PI 652555. Oryza sativa L.

Breeding. Pureline. WC 5139; CT6240-12-2-2-3; Q 38518. Pedigree - Ngovie/IRAT124//Colombia 1/M312A-74-2-8-8.

PI 652556. Oryza sativa L.

Breeding. Pureline. WC 5142; CT6249-8-4-2-2; Q 38521. Pedigree - Ngovie/IRAT124//Colombia 1/M312A-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 652557. *Oryza sativa* L.**
Breeding. Pureline. ACC 23; B 3622-ETB-5-4-4; Q 38643. Developed in Indonesia. Pedigree - IR1909-1-3-3-3/B981DSI-100.
- PI 652558. *Oryza sativa* L.**
Breeding. Pureline. ACC 115; CNA 104-B-243-2B; Q 38711. Developed in Brazil. Pedigree - IAC47/SR2041-50-1.
- PI 652559. *Oryza sativa* L.**
Cultivar. Pureline. "IRAT 101"; ACC 373; Q 38876. Developed in Cote D'Ivoire. Pedigree - 560/var. from Zaire.
- PI 652560. *Oryza sativa* L.**
Cultivar. Pureline. "IRAT 129"; ACC 393; Q 38892. Developed in Madagascar. Pedigree - Tsipala 421/IR8.
- PI 652561. *Oryza sativa* L.**
Cultivar. Pureline. "IRAT 130"; ACC 396; Q 38894. Developed in Madagascar. Pedigree - Chianan 8/MAD 1300.
- PI 652562. *Oryza sativa* L.**
Cultivar. Pureline. "IRAT 144"; ACC 405; Q 38903. Developed in Nigeria. Pedigree - IRAT 10/IRAT 13.
- PI 652563. *Oryza sativa* L.**
Cultivar. Pureline. "IRAT 146"; ACC 406; Q 38904. Developed in Cote D'Ivoire. Pedigree - IRAT 13/Dourado Precoce.
- PI 652564. *Oryza sativa* L.**
Cultivar. Pureline. "IRAT 147"; ACC 407; Q 38905. Developed in Burkina Faso. Pedigree - IRAT 13/Dourado Precoce.
- PI 652565. *Oryza sativa* L.**
Cultivar. Pureline. "IRAT 79 (1)"; ACC 411; Q 38908. Developed in Cote D'Ivoire. Pedigree - 560/var. from Zaire.
- PI 652566. *Oryza sativa* L.**
Cultivar. Pureline. "ITA 130"; ACC 420; Q 38912. Developed in Nigeria. Pedigree - 560/var. from Zaire//Moroberekan.
- PI 652567. *Oryza sativa* L.**
Cultivar. Pureline. "ITA 133"; ACC 421; Q 38913. Developed in Nigeria. Pedigree - Tchen Tchou Ai/TOX7-3-4-10-1.

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

- PI 652568. *Oryza sativa* L.**
Breeding. Pureline. ACC 518; MOROBEREKAN MUTANTE 1; Q 38978.
- PI 652569. *Oryza sativa* L.**
Breeding. Pureline. ACC 550; O.S.6 MUTANT; Q 39000.

- PI 652570. *Oryza sativa* L.**
Breeding. Pureline. ACC 597; P 2039-F4-112-4-4; Q 39033. Pedigree - P896-20-1-1-6-8-1B//IR262/Remadja.
- PI 652571. *Oryza sativa* L.**
Breeding. Pureline. ACC 604; P 2067-F4-85-3-3; Q 39036. Pedigree - S12-30/IR22//IR36/CICA 9.
- PI 652572. *Oryza sativa* L.**
Breeding. Pureline. ACC 605; P 2073-59; Q 39037. Pedigree - IR262/Remadja//BG90-2/CICA 8.
- PI 652573. *Oryza sativa* L.**
Breeding. Pureline. ACC 608; P 2182-F4-39-1B-1B; Q 39039. Pedigree - CICA 8//BG90-2/Pelita I-1.
- PI 652574. *Oryza sativa* L.**
Breeding. Pureline. ACC 625; P 3061-F4-150-1B; Q 39048. Pedigree - CICA 4//Camponi/K8.
- PI 652575. *Oryza sativa* L.**
Breeding. Pureline. ACC 633; P 899-55-5-2-5-2-18; Q 39053. Pedigree - IR665-23-3-1//IR841-63-5-104-1B/Tetep.

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

- PI 652576. *Oryza sativa* L.**
Cultivated. Pureline. ACC 650; PERU 65; Q 39063. Collected in Peru.
- PI 652577. *Oryza sativa* L.**
Cultivated. Pureline. ACC 666; P. RESISTENTE SEQUIA; Q 39076. Collected in Cote D'Ivoire.
- PI 652578. *Oryza sativa* L.**
Breeding. Pureline. ACC 682; RHS 107-2-2-1TB-1JM; Q 39087. Developed in Mexico. Pedigree - Grijalva Z71/Tetep//Salumpikit.
- PI 652579. *Oryza sativa* L.**
Breeding. Pureline. ACC 690; RP 1931-14-2-1-1; Q 39094. Developed in India. Pedigree - Ratna/K39.
- PI 652580. *Oryza sativa* L.**
Breeding. Pureline. ACC 705; SELECCION 36; Q 39102. Developed in Cuba.
- PI 652581. *Oryza sativa* L.**
Breeding. Pureline. ACC 706; SELECCION 37; Q 39103. Developed in Cuba.
- PI 652582. *Oryza sativa* L.**
Breeding. Pureline. ACC 723; SELECCION CA A VERDE; Q 39118. Developed in Cuba.
- PI 652583. *Oryza sativa* L.**
Breeding. Pureline. ACC 724; SELECCION TRES CUARTOS; Q 39119. Developed in Cuba.

- PI 652584. *Oryza sativa* L.**
Cultivar. Pureline. "SINALOA A-80"; ACC 736; Q 39128. Developed in Mexico. Pedigree - Sinaloa A68/Bluebonnet 50.
- PI 652585. *Oryza sativa* L.**
Cultivated. Pureline. ACC 741; S-N-4; Q 39131.
- PI 652586. *Oryza sativa* L.**
Breeding. Pureline. ACC 744; SERATUS MALAM MUTANT; Q 39132. Developed in Indonesia.
- PI 652587. *Oryza sativa* L.**
Breeding. Pureline. ACC 745; SPR 7284-57-5; Q 39133. Developed in Thailand. Pedigree - RD3/IR648-2-8-3-3.

The following were donated by Kazutoshi Okuno, National Institute of Agrobiological, Resources (NIAR), Tsukuba, Ibaraki 305, Japan. Received 06/04/1999.

- PI 652588. *Oryza sativa* L.**
Cultivar. Pureline. "CHIKANARIJUN 1"; 00007967; JP 7211; Q 40053. Developed in Japan.
- PI 652589. *Oryza sativa* L.**
Cultivar. Pureline. "MUIKAWASE"; 00007992; JP 7233; Q 40054. Developed in Japan.
- PI 652590. *Oryza sativa* L.**
Landrace. 00008254; Tochigiwase; JP 7480; Q 40056. Collected in Nagano, Japan.
- PI 652591. *Oryza sativa* L.**
Landrace. 00008255; Naranishiki; JP 7481; Q 40057. Collected in Ishikawa, Japan.
- PI 652592. *Oryza sativa* L.**
Landrace. 00008276; Kazusa Kobore; JP 7479; Q 40058. Collected in Ibaraki, Japan.
- PI 652593. *Oryza sativa* L.**
Breeding. Pureline. SEN-ICHI (4X); 00008322; JP 7532; Q 40059. Developed in Japan.
- PI 652594. *Oryza sativa* L.**
Breeding. Pureline. SM 166 (DS 1036); 00009548; JP 8745; Q 40061. Developed in Japan.
- PI 652595. *Oryza sativa* L.**
Breeding. Pureline. SM 167 (DS 1037); 00009549; JP 8746; Q 40062. Developed in Japan.
- PI 652596. *Oryza sativa* L.**
Breeding. Pureline. SM 308 (DS 1066); 00009578; JP 8775; Q 40063. Developed in Japan.

- PI 652597. *Oryza sativa* L.**
Breeding. Pureline. SM 381 (DS 1087); 00009599; JP 8796; Q 40064.
Developed in Japan.
- PI 652598. *Oryza sativa* L.**
Cultivar. Pureline. "SATSUKEI 8640"; 00054376; JP 49093; Q 40082.
Developed in Japan.
- PI 652599. *Oryza sativa* L.**
Cultivar. Pureline. "FUKEIMOCHI 120"; 00074350; JP 67812; Q 40083.
Developed in Japan.
- PI 652600. *Oryza sativa* L.**
Cultivar. Pureline. "IWATEHATAMOCHI"; 00087388; Norin 35; Tohoku Mochi 40; JP 4682; Q 40085. Developed in Japan.
- PI 652601. *Oryza sativa* L.**
Cultivar. Pureline. "KANTO MOCHI 39"; 00087389; JP 4996; Q 40086.
Developed in Japan.
- PI 652602. *Oryza sativa* L.**
Cultivar. Pureline. "RIKUTOU NORIN MOCHI 8"; 00005179; Norin 8; Tohoku 3; JP 4676; Q 40087. Developed in Japan.
- PI 652603. *Oryza sativa* L.**
Cultivar. Pureline. "RIKUTOU NORIN MOCHI 13"; 00005181; Norin 13; Tohoku 16; JP 4678; Q 40088. Developed in Japan.
- PI 652604. *Oryza sativa* L.**
Cultivar. Pureline. "HATAMINORIMOCHI"; 00005188; Norin 39; Kanto Mochi 58; JP 4684; Q 40089. Developed in Japan. Pedigree - Norin Mochi 1/Norin 7.
- PI 652605. *Oryza sativa* L.**
Cultivar. Pureline. "OKAMINORI"; 00005193; Norin 45; Kanto 73; JP 4689; Q 40090. Developed in Japan. Pedigree - Norin 24/Norin 29.
- PI 652606. *Oryza sativa* L.**
Cultivar. Pureline. "NASUKOGANE"; 00005363; Norin 46; Kanto 66; JP 4849; Q 40091. Developed in Japan. Pedigree - Norin 22/Norin Mochi 39.
- PI 652607. *Oryza sativa* L.**
Cultivar. Pureline. "FUKUHATAMOCHI"; 00005614; Norin 52; Kanto Mochi 111; JP 5075; Q 40092. Developed in Japan. Pedigree - Kanto Mochi 76/Ishikei 116.
- PI 652608. *Oryza sativa* L.**
Cultivar. Pureline. "TSUKUBAHATAMOCHI"; 00005627; Norin 53; Kanto Mochi 115; JP 5086; Q 40093. Developed in Japan. Pedigree - Kantomochi 63/Hatafusamochi.
- PI 652609. *Oryza sativa* L.**
Cultivar. Pureline. "MINAMINISHIKI"; 00038036; Norin 237; Nankai 55; JP 34184; Q 40113. Developed in Japan. Pedigree - Toyotama/Akibare.

- PI 652610. *Oryza sativa* L.**
Cultivar. Pureline. "DANGO D"; 00004783; JP 4390; Q 40115. Developed in Japan.
- PI 652611. *Oryza sativa* L.**
Landrace. 00004832; Joushuu b; JP 4435; Q 40116. Collected in Gumma, Japan.
- PI 652612. *Oryza sativa* L.**
Landrace. 00004837; Tokyo Touzou Mochi; JP 4439; Q 40117. Developed in Japan.
- PI 652613. *Oryza sativa* L.**
Landrace. 00004885; Saitama mochi 1; JP 4468; Q 40118. Developed in Japan.
- PI 652614. *Oryza sativa* L.**
Landrace. 00004946; Tamasai b; JP 4508; Q 40119. Collected in Japan.
- PI 652615. *Oryza sativa* L.**
Cultivar. Pureline. "HATAKINUMOCHI"; 00005190; Norin 44; Kanto Mochi 60; JP 4686; Q 40121. Developed in Japan.
- PI 652616. *Oryza sativa* L.**
Landrace. 00005234; Fuki; JP 4724; Q 40123. Collected in Japan.
- PI 652617. *Oryza sativa* L.**
Landrace. 00005307; Kumada Wase; JP 4796; Q 40124. Collected in Mie, Japan.
- PI 652618. *Oryza sativa* L.**
Landrace. 00005393; Riku Araki; JP 4878; Q 40126. Collected in Ibaraki, Japan.
- PI 652619. *Oryza sativa* L.**
Landrace. 00006500; Dougo Wase; JP 5785; Q 40128. Collected in Ehime, Japan.
- PI 652620. *Oryza sativa* L.**
Breeding. Pureline. GA-25-5 (DS-1284); 00007205; JP 6535; Q 40131. Developed in Japan.
- PI 652621. *Oryza sativa* L.**
Breeding. Pureline. F-133 (DS-1448); 00007306; JP 6636; Q 40134. Developed in Japan.
- PI 652622. *Oryza sativa* L.**
Breeding. Pureline. F-251 (DS-1456); 00007313; JP 6643; Q 40136. Developed in Japan.
- PI 652623. *Oryza sativa* L.**
Breeding. Pureline. F-256 (DS-1457); 00007314; JP 6644; Q 40137. Developed in Japan.
- PI 652624. *Oryza sativa* L.**
Breeding. Pureline. F-284 (DS-1458); 00007315; JP 6645; Q 40138. Developed in Japan.

- PI 652625. *Oryza sativa* L.**
Breeding. Pureline. F-280 (DS-1459); 00007316; JP 6646; Q 40139.
Developed in Japan.
- PI 652626. *Oryza sativa* L.**
Cultivar. Pureline. "KANKEI 326"; 00007546; JP 6845; Q 40141. Developed
in Japan.
- PI 652627. *Oryza sativa* L.**
Landrace. 00007562; Takasakimochi; JP 6858; Q 40142. Developed in Japan.
- PI 652628. *Oryza sativa* L.**
Cultivar. Pureline. "KOUBAN 5"; 00007570; JP 6865; Q 40143. Developed in
Japan.
- PI 652629. *Oryza sativa* L.**
Cultivar. Pureline. "SHINAKABOUZU 36"; 00007603; JP 6896; Q 40144.
Developed in Japan.
- PI 652630. *Oryza sativa* L.**
Cultivar. Pureline. "DOUGONAKATE"; 00007604; JP 6897; Q 40145. Developed
in Japan.
- PI 652631. *Oryza sativa* L.**
Cultivar. Pureline. "MUKETSUTOU 5"; 00007616; JP 6907; Q 40146.
Developed in Japan.
- PI 652632. *Oryza sativa* L.**
Cultivar. Pureline. "SHIGAASAHI 20"; 00007681; JP 9259; Q 40147.
Developed in Japan.
- PI 652633. *Oryza sativa* L.**
Landrace. 00007733; Tabifuse; JP 7004; Q 40149. Collected in Shimane,
Japan.
- PI 652634. *Oryza sativa* L.**
Cultivar. Pureline. "TANGOCHUUTOU"; 00007734; JP 7001; Q 40150.
Developed in Japan.
- PI 652635. *Oryza sativa* L.**
Landrace. 00007872; Yamatowase; JP 7129; Q 40151. Collected in Nara,
Japan.
- PI 652636. *Oryza sativa* L.**
Cultivar. Pureline. "KINAIWASE 22"; 00007912; JP 7168; Q 40152.
Developed in Japan.
- PI 652637. *Oryza sativa* L.**
Cultivar. Pureline. "KYOTOASAHI 1"; 00007918; JP 7172; Q 40154.
Developed in Japan.
- PI 652638. *Oryza sativa* L.**
Cultivar. Pureline. "ASAHI 2"; 00007923; JP 7177; Q 40155. Developed in
Japan.

- PI 652639. *Oryza sativa* L.**
Landrace. 00007946; Shiganishiki; JP 7194; Q 40156. Collected in Shiga, Japan.
- PI 652640. *Oryza sativa* L.**
Cultivar. Pureline. "KANTO 49"; 00008028; JP 7266; Q 40157. Developed in Japan.
- PI 652641. *Oryza sativa* L.**
Cultivar. Pureline. "KANTOMOCHI 69"; 00008032; JP 7270; Q 40158. Developed in Japan.
- PI 652642. *Oryza sativa* L.**
Cultivar. Pureline. "KANTO 72"; 00008033; JP 7271; Q 40159. Developed in Japan. Pedigree - Norin 29/Norin 24.
- PI 652643. *Oryza sativa* L.**
Landrace. 00008068; Shinoharamochi; JP 7304; Q 40160. Collected in Kyoto, Japan.
- PI 652644. *Oryza sativa* L.**
Cultivar. Pureline. "KITABU 2"; 00008078; JP 9827; Q 40161. Developed in Japan.
- PI 652645. *Oryza sativa* L.**
Landrace. 00008108; Myoujinmochi; JP 7335; Q 40162. Collected in Nagano, Japan.
- PI 652646. *Oryza sativa* L.**
Cultivar. Pureline. "KANTO 85"; 00008246; JP 7472; Q 40163. Developed in Japan.
- PI 652647. *Oryza sativa* L.**
Breeding. Pureline. 00008316; SUITOU NORIN 25 (4X); JP 7526; Q 40164. Developed in Japan.
- PI 652648. *Oryza sativa* L.**
Cultivar. Pureline. "KANTO 96"; 00008346; JP 7551; Q 40166. Developed in Japan.
- PI 652649. *Oryza sativa* L.**
Cultivar. Pureline. "KANTO 104"; 00008350; JP 7555; Q 40167. Developed in Japan.
- PI 652650. *Oryza sativa* L.**
Breeding. Pureline. M 1152 (DS 1235); 00009739; JP 8936; Q 40168. Developed in Japan.
- PI 652651. *Oryza sativa* L.**
Cultivar. Pureline. "HOKUTAIMOCHI 1"; 00009883; JP 9077; Q 40169. Developed in Japan.
- PI 652652. *Oryza sativa* L.**
Cultivar. Pureline. "NAKATESHINRIKI 4"; 00010131; JP 9299; Q 40171. Developed in Japan.

- PI 652653. *Oryza sativa* L.**
Landrace. 00010138; Sugano; JP 9304; Q 40172. Collected in Shiga, Japan.
- PI 652654. *Oryza sativa* L.**
Landrace. 00010146; Shinkoku; JP 9312; Q 40173. Collected in Chiba, Japan.
- PI 652655. *Oryza sativa* L.**
Landrace. 00010148; Tangowase; JP 9314; Q 40174. Collected in Shiga, Japan.
- PI 652656. *Oryza sativa* L.**
Landrace. 00010150; Ofukuwase; JP 9316; Q 40175. Collected in Shiga, Japan.
- PI 652657. *Oryza sativa* L.**
Landrace. 00010167; Yamasakae; JP 9333; Q 40177. Collected in Mie, Japan.
- PI 652658. *Oryza sativa* L.**
Landrace. 00010176; Meguro; JP 9342; Q 40178. Collected in Wakayama, Japan.
- PI 652659. *Oryza sativa* L.**
Landrace. 00010188; Hieshirazu; JP 9354; Q 40179. Collected in Wakayama, Japan.
- PI 652660. *Oryza sativa* L.**
Landrace. 00010245; Yamatomochi; JP 9408; Q 40180. Collected in Mie, Japan.
- PI 652661. *Oryza sativa* L.**
Landrace. 00010246; Aikame; JP 9409; Q 40181. Collected in Mie, Japan.
- PI 652662. *Oryza sativa* L.**
Landrace. 00010254; Higanmochi; JP 9417; Q 40182. Collected in Mie, Japan.
- PI 652663. *Oryza sativa* L.**
Landrace. 00010267; Enshuu; JP 9430; Q 40183. Collected in Nara, Japan.
- PI 652664. *Oryza sativa* L.**
Landrace. 00010269; Akamochi; JP 9432; Q 40184. Collected in Nara, Japan.
- PI 652665. *Oryza sativa* L.**
Cultivar. Pureline. "KINKI 42"; 00010334; JP 9495; Q 40186. Developed in Japan.
- PI 652666. *Oryza sativa* L.**
Cultivar. Pureline. "KINKI 46"; 00010336; JP 9497; Q 40187. Developed in Japan.
- PI 652667. *Oryza sativa* L.**
Landrace. 00010366; Mitaba; JP 9521; Q 40188. Collected in Osaka, Japan.
- PI 652668. *Oryza sativa* L.**
Cultivar. Pureline. "SENGOKU 97"; 00010402; JP 9557; Q 40189. Developed in Japan.

- PI 652669. *Oryza sativa* L.**
Cultivar. Pureline. "HOKUCHUU 7"; 00010430; JP 9262; Q 40190. Developed in Japan.
- PI 652670. *Oryza sativa* L.**
Cultivar. Pureline. "TOKAIMOCHI 23"; 00010448; JP 9596; Q 40191. Developed in Japan.
- PI 652671. *Oryza sativa* L.**
Cultivar. Pureline. "KOUIKU 3"; 00010559; JP 9639; Q 40192. Developed in Japan.
- PI 652672. *Oryza sativa* L.**
Landrace. 0738; 00010579; JP 9659; Q 40194. Collected 1963 in Tokushima, Japan.
- PI 652673. *Oryza sativa* L.**
Landrace. 00010584; Sennari; JP 9664; Q 40195. Collected in Tokushima, Japan.
- PI 652674. *Oryza sativa* L.**
Landrace. 00010588; Nagaine; JP 9668; Q 40196. Collected in Tokushima, Japan.
- PI 652675. *Oryza sativa* L.**
Landrace. 00010596; Otsunebouzu; JP 9676; Q 40197. Collected in Kochi, Japan.
- PI 652676. *Oryza sativa* L.**
Landrace. 00010601; Hieri; JP 9681; Q 40198. Collected in Kochi, Japan.
- PI 652677. *Oryza sativa* L.**
Landrace. 00010623; Kurobe; JP 9703; Q 40200. Collected in Tokushima, Japan.
- PI 652678. *Oryza sativa* L.**
Cultivar. Pureline. "NAKATEMAGATAMA"; 00010760; JP 9832; Q 40203. Developed in Japan.
- PI 652679. *Oryza sativa* L.**
Cultivar. Pureline. "TOSASENBON"; 00010776; Norin 174; Chugoku 16; JP 9845; Q 40206. Developed in Japan. Pedigree - Tadukan/Norin 29.
- PI 652680. *Oryza sativa* L.**
Cultivar. Pureline. "TANCHOU MOCHI"; 00010777; Norin 123; Chugoku Mochi 11; JP 9846; Q 40207. Developed in Japan. Pedigree - Sakura Mochi 1/Kinki Mochi 53.
- PI 652681. *Oryza sativa* L.**
Landrace. 00010796; Rino (Hie ine); JP 9864; Q 40209. Collected in Tottori, Japan.
- PI 652682. *Oryza sativa* L.**
Cultivar. Pureline. "AIKOKU 2"; 00010819; JP 9824; Q 40210. Developed in Japan.

- PI 652683. *Oryza sativa* L.**
Landrace. 00010824; Matsuyama 3; JP 9889; Q 40212. Collected in Shimane, Japan.
- PI 652684. *Oryza sativa* L.**
Landrace. 00010826; Kinboshi; JP 9891; Q 40213. Collected in Shimane, Japan.
- PI 652685. *Oryza sativa* L.**
Landrace. 00010844; Shin senbon (majiri) 0580; JP 9907; Q 40216.
Collected in Hiroshima, Japan.
- PI 652686. *Oryza sativa* L.**
Landrace. 0588; 00010852; JP 9915; Q 40217. Collected 1963 in Hiroshima, Japan.
- PI 652687. *Oryza sativa* L.**
Landrace. 00010862; Majiri 0597; JP 9924; Q 40218. Collected 1963 in Hiroshima, Japan.
- PI 652688. *Oryza sativa* L.**
Landrace. 00010867; Majiri 0602; JP 9929; Q 40219. Collected 1963 in Hiroshima, Japan.
- PI 652689. *Oryza sativa* L.**
Landrace. 00010870; Senbongata (majiri) 0606; JP 9932; Q 40220.
Collected in Hiroshima, Japan.
- PI 652690. *Oryza sativa* L.**
Landrace. 00010871; Senbongata (majiri) 0607; JP 9933; Q 40221.
Collected in Hiroshima, Japan.
- PI 652691. *Oryza sativa* L.**
Landrace. 00010872; Majiri 0608; JP 9934; Q 40222. Collected 1963 in Hiroshima, Japan.
- PI 652692. *Oryza sativa* L.**
Landrace. 00010875; Majiri 0611; JP 9937; Q 40223. Collected 1963 in Hiroshima, Japan.
- PI 652693. *Oryza sativa* L.**
Landrace. 00010880; Kuromochi; JP 9942; Q 40224. Collected in Hiroshima, Japan.
- PI 652694. *Oryza sativa* L.**
Landrace. 00010904; Majiri 0641; JP 9965; Q 40225. Collected 1963 in Hiroshima, Japan.
- PI 652695. *Oryza sativa* L.**
Landrace. 00010911; Majiri 0648; JP 9972; Q 40226. Collected 1963 in Hiroshima, Japan.
- PI 652696. *Oryza sativa* L.**
Landrace. 00010912; Majiri 0649; JP 9973; Q 40227. Collected 1963 in Hiroshima, Japan.

- PI 652697. *Oryza sativa* L.**
Landrace. 00010915; Hiroshimaomachi; JP 9975; Q 40228. Collected in Hiroshima, Japan.
- PI 652698. *Oryza sativa* L.**
Landrace. 00010917; Yuuboubizenomachi; JP 9977; Q 40229. Collected in Hiroshima, Japan.
- PI 652699. *Oryza sativa* L.**
Landrace. 00010918; Bizenomachi; JP 9978; Q 40230. Collected in Hiroshima, Japan.
- PI 652700. *Oryza sativa* L.**
Landrace. 00010919; Funakiomachi; JP 9979; Q 40231. Collected in Hiroshima, Japan.
- PI 652701. *Oryza sativa* L.**
Landrace. 00010920; Kinboshi; JP 9980; Q 40232. Collected in Hiroshima, Japan.
- PI 652702. *Oryza sativa* L.**
Cultivar. Pureline. "KAIRYOUYAMADANISHIKI 183"; 00010922; JP 9982; Q 40233. Developed in Japan.
- PI 652703. *Oryza sativa* L.**
Cultivar. Pureline. "KISSAMOCHI 1"; 00010924; JP 9984; Q 40234. Developed in Japan.
- PI 652704. *Oryza sativa* L.**
Cultivar. Pureline. "KISSAMOCHI 2"; 00010925; JP 9985; Q 40235. Developed in Japan.
- PI 652705. *Oryza sativa* L.**
Landrace. 00010928; Jinsekimochi; JP 9988; Q 40236. Collected in Hiroshima, Japan.
- PI 652706. *Oryza sativa* L.**
Landrace. 0438; 00010936; JP 9995; Q 40237. Collected 1963 in Tottori, Japan.
- PI 652707. *Oryza sativa* L.**
Landrace. 00010938; Shinowaramochi 0443-1; JP 9997; Q 40238. Collected in Tottori, Japan.
- PI 652708. *Oryza sativa* L.**
Landrace. 00010940; Shinowaramochi 0443; JP 9999; Q 40239. Collected in Tottori, Japan.
- PI 652709. *Oryza sativa* L.**
Landrace. 00010941; Shinowaramochi (majiri) 0444; JP 10000; Q 40240. Collected in Tottori, Japan.
- PI 652710. *Oryza sativa* L.**
Landrace. 00010942; Shinowaramochi (majiri) 0445; JP 10001; Q 40241. Collected in Tottori, Japan.

- PI 652711. *Oryza sativa* L.**
Landrace. 00010952; Nijimochi (majiri) 0466; JP 10011; Q 40242.
Collected in Shimane, Japan.
- PI 652712. *Oryza sativa* L.**
Landrace. 00010960; Yutakashuuhou (majiri); JP 10019; Q 40243. Collected
in Shimane, Japan.
- PI 652713. *Oryza sativa* L.**
Landrace. 00010967; Nijimochi (majiri) 0485; JP 10026; Q 40244.
Collected in Shimane, Japan.
- PI 652714. *Oryza sativa* L.**
Landrace. 00010968; Nijimochi (majiri) 0486; JP 10027; Q 40245.
Collected in Shimane, Japan.
- PI 652715. *Oryza sativa* L.**
Landrace. 00010986; Horamochi (majiri) 0514; JP 10041; Q 40246.
Collected in Shimane, Japan.
- PI 652716. *Oryza sativa* L.**
Landrace. 00010991; Horamochi (majiri) 0519; JP 10046; Q 40247.
Collected in Shimane, Japan.
- PI 652717. *Oryza sativa* L.**
Landrace. 00010998; Akamochi (majiri) 0523(2); JP 10053; Q 40248.
Collected in Shimane, Japan.
- PI 652718. *Oryza sativa* L.**
Landrace. 00011004; Akamochi (majiri) 0528; JP 10059; Q 40249. Collected
in Shimane, Japan.
- PI 652719. *Oryza sativa* L.**
Landrace. 00011005; Akamochi (majiri) 0529; JP 10060; Q 40250. Collected
in Shimane, Japan.
- PI 652720. *Oryza sativa* L.**
Landrace. 00011012; Mizumochi; JP 10067; Q 40251. Collected in Shimane,
Japan.
- PI 652721. *Oryza sativa* L.**
Landrace. 00011015; Futahomochi; JP 10070; Q 40252. Collected in
Shimane, Japan.
- PI 652722. *Oryza sativa* L.**
Landrace. 00011017; Bingomochi; JP 10072; Q 40253. Collected in Shimane,
Japan.
- PI 652723. *Oryza sativa* L.**
Landrace. 00011031; Akamochi; JP 10084; Q 40254. Collected in Shimane,
Japan.
- PI 652724. *Oryza sativa* L.**
Landrace. 00011034; Fumeimochi; JP 10087; Q 40255. Collected in Shimane,
Japan.

- PI 652725. *Oryza sativa* L.**
Cultivar. Pureline. "YAGUMO"; 00011040; JP 7128; Q 40256. Developed in Japan.
- PI 652726. *Oryza sativa* L.**
Cultivar. Pureline. "SAN-IN 1"; 00011044; JP 10094; Q 40257. Developed in Japan.
- PI 652727. *Oryza sativa* L.**
Cultivar. Pureline. "SAN-IN 7"; 00011048; JP 10098; Q 40258. Developed in Japan.
- PI 652728. *Oryza sativa* L.**
Cultivar. Pureline. "SAN-IN 11"; 00011049; JP 10099; Q 40259. Developed in Japan.
- PI 652729. *Oryza sativa* L.**
Cultivar. Pureline. "SAN-IN 12"; 00011050; JP 10100; Q 40260. Developed in Japan.
- PI 652730. *Oryza sativa* L.**
Cultivar. Pureline. "SAN-IN 15"; 00011052; JP 10102; Q 40261. Developed in Japan.
- PI 652731. *Oryza sativa* L.**
Cultivar. Pureline. "SAN-IN 20"; 00011055; JP 10105; Q 40262. Developed in Japan.
- PI 652732. *Oryza sativa* L.**
Cultivar. Pureline. "SAN-IN MOCHI 28"; 00011060; JP 10110; Q 40264. Developed in Japan.
- PI 652733. *Oryza sativa* L.**
Cultivar. Pureline. "SAN-IN 35"; 00011064; JP 10114; Q 40265. Developed in Japan.
- PI 652734. *Oryza sativa* L.**
Cultivar. Pureline. "SAN-IN MOCHI 37"; 00011066; JP 10116; Q 40266. Developed in Japan.
- PI 652735. *Oryza sativa* L.**
Cultivar. Pureline. "SAN-IN 78"; 00011095; JP 10145; Q 40267. Developed in Japan.
- PI 652736. *Oryza sativa* L.**
Cultivar. Pureline. "CHUGOKU 14"; 00011109; Q 40268. Developed in Japan.
- PI 652737. *Oryza sativa* L.**
Cultivar. Pureline. "CHUGOKU 23"; 00011113; Q 40269. Developed in Japan.
- PI 652738. *Oryza sativa* L.**
Cultivar. Pureline. "CHUGOKU 33"; 00011120; Q 40270. Developed in Japan.
- PI 652739. *Oryza sativa* L.**
Cultivar. Pureline. "CHUGOKU 35"; 00011122; Q 40271. Developed in Japan.

- PI 652740. *Oryza sativa* L.**
Cultivar. Pureline. "CHUGOKU 59"; 00011145; Q 40272. Developed in Japan.
- PI 652741. *Oryza sativa* L.**
Cultivar. Pureline. "CHUGOKU 62"; 00011148; Q 40273. Developed in Japan.
- PI 652742. *Oryza sativa* L.**
Cultivar. Pureline. "SAN-IN 82"; 00011165; JP 10210; Q 40276. Developed in Japan.
- PI 652743. *Oryza sativa* L.**
Cultivar. Pureline. "SAN-IN 87"; 00011167; JP 10212; Q 40277. Developed in Japan.
- PI 652744. *Oryza sativa* L.**
Cultivar. Pureline. "KOTENGU 8"; 00011209; JP 10230; Q 40278. Developed in Japan.
- PI 652745. *Oryza sativa* L.**
Cultivar. Pureline. "MICHIKOGANE"; 00037854; JP 34039; Q 40279.
Developed in Japan. Pedigree - Kuuiku 99/Hokkai 230.
- PI 652746. *Oryza sativa* L.**
Cultivar. Pureline. "HAYAKOGANE"; 00037855; JP 34040; Q 40280. Developed in Japan. Pedigree - Hokuto/Joiku 272.
- PI 652747. *Oryza sativa* L.**
Cultivar. Pureline. "KITAAKE"; 00037856; Norin 268; Douhoku 36; JP 5340; Q 40281. Developed in Japan. Pedigree - Eikei 7361/Douhoku 5.
- PI 652748. *Oryza sativa* L.**
Cultivar. Pureline. "TOMOHIKARI"; 00037857; JP 34041; Q 40282. Developed in Japan. Pedigree - Kitahikari/Tomoemasari//Kuuiku 99.
- PI 652749. *Oryza sativa* L.**
Cultivar. Pureline. "TANNEMOCHI"; 00037864; Jouiku Mochi 38; Eikei 78396; JP 34038; Q 40285. Developed in Japan.
- PI 652750. *Oryza sativa* L.**
Cultivar. Pureline. "TAMAHIKARI"; 00037872; Toiku 37; JP 34046; Q 40289. Developed in Japan.
- PI 652751. *Oryza sativa* L.**
Cultivar. Pureline. "KAMENISHIKI"; 00037878; JP 34051; Q 40293. Developed in Japan.
- PI 652752. *Oryza sativa* L.**
Cultivar. Pureline. "TSUGARUBOUZU 1"; 00037894; JP 7027; Q 40297. Developed in Japan.
- PI 652753. *Oryza sativa* L.**
Landrace. 00037897; Sakatawase; JP 34065; Q 40299. Collected in Hokkaido, Japan.
- PI 652754. *Oryza sativa* L.**
Landrace. 00037898; Tamakiwase; JP 34066; Q 40300. Collected in Hokkaido, Japan.

- PI 652755. *Oryza sativa* L.**
Landrace. 00037900; Mizukuchiine; JP 34068; Q 40301. Collected in Hokkaido, Japan.
- PI 652756. *Oryza sativa* L.**
Landrace. 00037904; Minamichuto; JP 34072; Q 40302. Collected in Hokkaido, Japan.
- PI 652757. *Oryza sativa* L.**
Landrace. 00037912; Nankoushiroke; JP 34080; Q 40303. Collected in Hokkaido, Japan.
- PI 652758. *Oryza sativa* L.**
Landrace. 00037914; Ogasawarachikanari; JP 34082; Q 40304. Collected in Hokkaido, Japan.
- PI 652759. *Oryza sativa* L.**
Cultivar. Pureline. "HOKKEN 22"; 00037925; JP 34092; Q 40305. Developed in Japan.
- PI 652760. *Oryza sativa* L.**
Cultivar. Pureline. "HOKKAI 223"; 00037929; JP 34096; Q 40307. Developed in Japan.
- PI 652761. *Oryza sativa* L.**
Cultivar. Pureline. "HOKKAI 226"; 00037932; JP 34099; Q 40308. Developed in Japan.
- PI 652762. *Oryza sativa* L.**
Cultivar. Pureline. "HOKKAI 249"; 00037934; JP 5333; Q 40310. Developed in Japan.
- PI 652763. *Oryza sativa* L.**
Cultivar. Pureline. "HOKKAI 252"; 00037935; JP 5336; Q 40311. Developed in Japan.
- PI 652764. *Oryza sativa* L.**
Cultivar. Pureline. "HOKKAI 256"; 00037936; JP 34101; Q 40312. Developed in Japan.
- PI 652765. *Oryza sativa* L.**
Cultivar. Pureline. "HOKKAI 257"; 00037937; JP 34102; Q 40313. Developed in Japan.
- PI 652766. *Oryza sativa* L.**
Cultivar. Pureline. "SACHIHO"; 00037940; JP 34105; Q 40314. Developed in Japan. Pedigree - Sasahonamani//Ku Kei 1/Hokkai 190.
- PI 652767. *Oryza sativa* L.**
Cultivar. Pureline. "KAMUIMOCHI"; 00037944; JP 5285; Q 40315. Developed in Japan.
- PI 652768. *Oryza sativa* L.**
Cultivar. Pureline. "HOKKAI 212"; 00037953; JP 34113; Q 40319. Developed in Japan.

PI 652769. *Oryza sativa* L.

Cultivar. Pureline. "HOKKAI 213"; 00037954; JP 34114; Q 40320. Developed in Japan.

PI 652770. *Oryza sativa* L.

Cultivar. Pureline. "HOKKAI 214"; 00037955; JP 34115; Q 40321. Developed in Japan.

PI 652771. *Oryza sativa* L.

Cultivar. Pureline. "HOKKAI 248"; 00037959; JP 5332; Q 40323. Developed in Japan.

PI 652772. *Oryza sativa* L.

Cultivar. Pureline. "HOKKAI 250"; 00037960; JP 5334; Q 40324. Developed in Japan.

PI 652773. *Oryza sativa* L.

Cultivar. Pureline. "HOKKAI 251"; 00037961; JP 5335; Q 40325. Developed in Japan.

The following were developed by Ente Nazionale Risi, Centro di Ricerche Sul Riso, P.zza Martiri della Liberta,31, Mortara, Lombardy, Italy. Donated by Virgilio C. Andaya, California Rice Research Foundation, Rice Experiment Station, P.O. Box 306, Biggs, California 95917-0306, United States; Massimo Biloni, SAPISE Soc. Coop., Via G. Mameli, 7, Vercelli, Italy. Received 01/28/2008.

PI 652774. *Oryza sativa* L.

Cultivar. Pureline. "CARNAROLI"; NSGC 18829. Pedigree - Vialone/Lencino.

The following were donated by T.B. Lee, Seoul National University, Department of Forestry, College of Agriculture, Seoul, Kyonggi, Korea, South. Received 04/08/1983.

PI 652775. *Sambucus canadensis* L.

Cultivated. CSAM 1. Collected 1980 in Korea, South. Pedigree - Open-pollinated from botanical collection. No additional information provided, original source unknown.

The following were collected by Melvin N. Westwood, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Li. Donated by Melvin N. Westwood, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 04/08/1983.

PI 652776. *Sambucus chinensis* Lindl.

Cultivated. CSAM 2. Collected 08/25/1981 in Taiwan. Mai Fong Farm, Taiwan. Pedigree - Uncertain.

The following were collected by E. Durant McArthur, USDA, FS, Int. Forest & Range Exper. Station, Shrub Sciences Laboratory, Provo, Utah 84601, United States. Received 11/10/1981.

PI 652777. *Sambucus racemosa* var. *microbotrys* (Rydb.) Kearney & Peebles Wild. CSAM 3. Collected 1978 in Utah, United States. Latitude 38° N. Longitude 111° W. Mayfield Canyon. Pedigree - Collected from the wild in Utah.

The following were donated by E. Durant McArthur, USDA, FS, Int. Forest & Range Exper. Station, Shrub Sciences Laboratory, Provo, Utah 84601, United States. Received 11/10/1981.

PI 652778. *Sambucus cerulea* Raf. Cultivated. Blue Elder; CSAM 5. Collected 1979 in Idaho, United States. Pedigree - Uncertain.

The following were collected by E. Durant McArthur, USDA, FS, Int. Forest & Range Exper. Station, Shrub Sciences Laboratory, Provo, Utah 84601, United States. Received 11/10/1981.

PI 652779. *Sambucus cerulea* Raf. Wild. Blue Elder; CSAM 6. Collected 1980 in Utah, United States. Latitude 38° N. Longitude 111° W. Ephraim Canyon. Pedigree - Collected from the wild in Utah.

The following were collected by Jim Chandler, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received 07/04/1982.

PI 652780. *Sambucus racemosa* var. *arborescens* (Torr. & A. Gray) A. Gray Wild. CSAM 7. Collected 07/1982 in Oregon, United States. Latitude 44° 30' N. Longitude 122° 30' W. Pedigree - Collected from the wild in Oregon.

The following were donated by Melvin N. Westwood, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 08/20/1982.

PI 652781. *Sambucus racemosa* f. *stenophylla* (Nakai) H. Hara Wild. CSAM 8. Collected in Hokkaido, Japan. Pedigree - Collected from the wild in Japan.

The following were developed by William W. Adams. Donated by Robert Ticknor, Oregon State University, North Willamette Exp. Sta., 15210 NE Miley Rd., Aurora, Oregon 97002, United States. Received 03/17/1982.

PI 652782. *Sambucus canadensis* L. Cultivar. "Adams I"; CANADA SAM0102; CSAM 17. Pedigree - Selected from the wild in New York. Fruit: clusters and berries exceptionally large, berries somewhat larger than Adams 2. Plant: only partially self fruitful; cross-pollination required; bark of mature stems is greenish-gray in autumn, strong, vigorous, productive. Brooks and Olmo, 1972. Huge clusters of large sweet glistening, purplish black berries. Ideal for pie, jam, preserves, juice, and wine. More vitamin C than an orange or grapefruit. Strong, vigorous, 6 - 10' shrub. Lovely autumn foliage. Beautiful broad white flowers in June; flowers also excellent for wine. Requires cross-pollination

with another variety. Productive and hardy; easy to grow. Not bothered by insects or disease. Grows in any soil in partial shade or full sun. Tolerates wet locations well. Ripens about August 1. Hardy in Zone 3. Originated in New York. Introduced in 1926.

PI 652783. *Sambucus canadensis* L.

Cultivar. "Adams II"; CSAM 18. Pedigree - Selected from the wild in New York. Fruit: cluster exceptionally large, berries somewhat smaller than Adams 1. Plant: only partially self-fruitful, cross pollination required, during autumn, bark of mature stems is reddish, strong, vigorous, somewhat more productive than Adams. Brooks and Olmo, 1972.

The following were collected by Otto L. Jahn, 33740 Terra Ln., Corvallis, Oregon 97330, United States. Received 09/27/1984.

PI 652784. *Sambucus cerulea* Raf.

Wild. Blue Elder; CSAM 24. Collected 09/26/1984 in Oregon, United States. Latitude 44° 5' N. Longitude 122° 10' W. Elevation 1280 m. Willamette Nat'l Forest above Cougar Reservoir. Pedigree - Collected from the wild in Oregon. Small population of scattered plants, blue-black fruit.

The following were donated by J. A. Witt, University of Washington, Washington Park Arboretum, Center for Urban Horticulture, Seattle, Washington 98195, United States. Received 05/03/1985.

PI 652785. *Sambucus cerulea* Raf.

Wild. Blue Elder; CSAM 28. Collected in Oregon, United States. Latitude 45° 58' N. Longitude 117° 30' W. Elevation 770 m. Wallowa County. Pedigree - Collected from the wild in Oregon.

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; James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, 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 08/10/1985.

PI 652786. *Sambucus cerulea* Raf.

Wild. Blue Elder; CSAM 31. Collected 08/08/1985 in Washington, United States. Latitude 46° 30' N. Longitude 121° 55' W. Elevation 400 m. Gifford Pinchot Nat'l Forest, along roadside along US 12. Pedigree - Collected from the wild in Washington. Plant 15 feet x 15 feet, 10% ripe.

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; James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States; Otto L. Jahn, 33740 Terra Ln., Corvallis, Oregon 97330, 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 08/07/1985.

PI 652787. *Sambucus racemosa* L.

Wild. European Red Elder; CSAM 32. Collected 08/1985 in Oregon, United States. Latitude 44° N. Longitude 123° 50' W. Elevation 120 m. Suislaw Nat'l Forest, along fairly heavily wooded roadsides. Pedigree - Collected from the wild in Oregon. Small population collection of OP fruit.

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; James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, 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 08/21/1985.

PI 652788. *Sambucus racemosa* L.

Wild. European Red Elder; CSAM 33. Collected 08/08/1985 in Washington, United States. Latitude 47° 10' N. Longitude 123° 30' W. Elevation 760 m. Olympic Nat'l Forest along road near Wynoochee River bridge. Pedigree - Collected from the wild in Washington. Population collection of open-pollinated fruit.

The following were collected by Otto L. Jahn, 33740 Terra Ln., Corvallis, Oregon 97330, United States. Received 09/18/1985.

PI 652789. *Sambucus racemosa* L.

Wild. European Red Elder; CSAM 35. Collected 08/10/1985 in Finland. Latitude 60° N. Longitude 25° E. Helsinki, in park North of Olympic Stadium w/deciduous spp. Pedigree - Collected from the wild in Finland. Large shrub to +- 4m, red fruit in small, tight oval cluster.

PI 652790. *Sambucus cerulea* Raf.

Wild. Blue Elder; CSAM 36. Collected 09/14/1985 in Oregon, United States. Latitude 42° N. Longitude 124° 30' W. Elevation 1040 m. Siskiyou Nat'l Forest, SW crest of Burnt Ridge, logged area. Pedigree - Collected from the wild in Oregon. Shrub to small tree, +-5m, light to moderate fruit crop. Population sample.

PI 652791. *Sambucus cerulea* Raf.

Wild. Blue Elder; CSAM 37. Collected 09/25/1985 in Oregon, United States. Latitude 44° 45' N. Longitude 122° 5' W. Elevation 900 m. Willamette Nat'l Forest, along roadside near Detroit. Pedigree - Collected from the wild in Oregon. Small tree to 5m, typical of species.

PI 652792. *Sambucus cerulea* Raf.

Wild. Blue Elder; CSAM 39. Collected 08/09/1986 in California, United States. Latitude 39° 40' N. Longitude 121° W. Elevation 1690 m. Plumas Nat'l Forest along roadside west of Pilot Peak. Pedigree - Collected from the wild in California. Typical large shrub to +-4m. Small population along road, few with mature fruit.

The following were donated by Nancy Fredericks, Oregon State University, Dept. Plant Pathology, Corvallis, Oregon 97331, United States. Received 07/13/1987.

PI 652793. *Sambucus racemosa* L.

Uncertain. Blackbeard Elder; CSAM 41. Pedigree - Unknown. (This accession was part of the PL,SD 'breakout' - 1992).

The following were donated by C.T. Kennedy, California Rare Fruit Growers, 1315 33rd Ave., San Francisco, California 94122, United States. Received 12/04/1987.

PI 652794. *Sambucus nigra* L.

Cultivar. "Korsor"; European Elder; CSAM 42. Developed in Uncertain. Pedigree - Uncertain.

The following were collected by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; David Brenner, Iowa State University, Regional Plant Introduction Station, Room G212, Agronomy Building, Ames, Iowa 50011-1170, United States. Donated by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 01/12/1989.

PI 652795. *Sambucus wightiana* Wall. ex Wight & Arn.

Wild. CSAM 43. Collected 1988 in Pakistan. Latitude 30° N. Longitude 70° E. Pedigree - Collected from the wild in Pakistan.

PI 652796. *Sambucus wightiana* Wall. ex Wight & Arn.

Wild. CSAM 44. Collected 1988 in Pakistan. Latitude 30° N. Longitude 70° E. Pedigree - Collected from the wild in Pakistan.

The following were collected by James F. Hancock, Michigan State University, Department of Horticulture, Plant and Soil Science A 342, East Lansing, Michigan 48824-1325, United States; James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States. Donated by James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States. Received 08/24/1989.

PI 652797. *Sambucus* sp.

Wild. CSAM 46. Collected 08/1989 in United States. Flathead Nat'l Forest, Coal Ridge trail. Pedigree - Collected from the wild in Montana. Fruit sample from one red-fruited plant.

The following were developed by G.L. Slate, New York Agr. Exp. Sta., Geneva, New York, United States. Donated by Bill MacKently, St. Lawrence Nurseries, 325 State Highway 345, RD 2, Potsdam, New York 13676, United States. Received 11/24/1989.

PI 652798. *Sambucus canadensis* L.

Cultivar. "York"; CANADA SAM0107; American Elder; CSAM 48. Pedigree - Adams II x Ezyoff. Fruit: cluster heavy, berry large, during a 4-year period, averaged only 9.9% soluble solids, about 3% less than Johns,

Scotia, and Victoria, ripens after Adams 1 and Adams 2. Plant: very large, more productive than Adams 1 and Adams 2. <band Olmo, 1972. Considered to be one of the best cultivars of elderberry.

The following were donated by Carlton Nursery, 14301 SE Wallace Rd., PO Box 398, Dayton, Oregon 97114-9988, United States. Received 01/10/1990.

PI 652799. *Sambucus canadensis* L.

Cultivar. "Golden"; American Elder; CSAM 49. Developed in United States. Pedigree - Uncertain.

The following were donated by Gu Yin, Jiangsu Institute of Botany, Nanjing Botanical Garden, Mem. Sun Yat-sen, Nanjing, Jiangsu 210014, China. Received 01/29/1990.

PI 652800. *Sambucus williamsii* Hance

Cultivated. CSAM 50. Pedigree - Open pollinated from botanical collection.

The following were developed by USDA, ARS, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Donated by Hortus Botanicus Academie Scientiarum, Taschkent, Karamurtakaja, Tashkent, Uzbekistan. Received 04/24/1990.

PI 652801. *Sambucus racemosa* subsp. *sibirica* (Nakai) H. Hara

Cultivated. CSAM 52. Collected in Uzbekistan. Pedigree - Open pollinated from botanical collection. (This accession was part of the PL,SD 'breakout' - 1992).

The following were donated by Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 02/13/1991.

PI 652802. *Sambucus racemosa* subsp. *sieboldiana* (Miq.) H. Hara

Wild. 102F; CSAM 65; Ames 4325. Collected in Russian Federation. Far Eastern USSR. Pedigree - Collected from the wild in the USSR.

PI 652803. *Sambucus racemosa* subsp. *sieboldiana* (Miq.) H. Hara

Wild. CSAM 66. Collected in Russian Federation. Far Eastern USSR. Pedigree - Collected from the wild in the USSR.

PI 652804. *Sambucus racemosa* subsp. *sieboldiana* (Miq.) H. Hara

Wild. CSAM 67. Collected in Russian Federation. Far Eastern USSR. Pedigree - Collected from the wild in the USSR.

PI 652805. *Sambucus racemosa* L. subsp. *racemosa*

Wild. 1572-84; CSAM 68; Ames 4962. Collected in Armenia. Armenian SSR, disturbed area above Sevan-Erevan highway about 20 km N of Erevan, rocky well-drained soil. Pedigree - Collected from the wild in the USSR.

PI 652806. *Sambucus cerulea* Raf.

Wild. CSAM 69. Collected in Colorado, United States. Elevation 2275 m. Costilla County, Colorado. Pedigree - Collected from the wild in Colorado.

The following were developed by Elwyn M. Meader, 43 Meaderboro Rd., Rochester, New Hampshire 03867-4235, United States. Received 04/13/1991.

PI 652807. *Sambucus canadensis* L.

Breeding. CSAM 72. Pedigree - Uncertain: seedling selection?. Professor Elwin Meader - 'A volunteer seedling that came up under the eaves of my barn that has the best elderberries I've seen for size of berries and blossom clusters. The extra thick leaves make me wonder if it may not be a tetraploid. I've labeled it 'Barn' elderberry for convenience as to identification.'

The following were developed by William W. Adams. Donated by Richard H. Converse, USDA/ARS, Oregon State University, Dept. Botany & Plant Pathology, Corvallis, Oregon, United States. Received 10/03/1991.

PI 652808. *Sambucus canadensis* L.

Cultivar. "Adams I"; CANADA SAM0102; CSAM 75. Pedigree - Selected from the wild in New York. Fruit: clusters and berries exceptionally large, berries somewhat larger than Adams 2. Plant: only partially self fruitful; cross-pollination required; bark of mature stems is greenish-gray in autumn, strong, vigorous, productive. Brooks and Olmo, 1972.

PI 652809. *Sambucus canadensis* L.

Cultivar. "Adams II"; CSAM 76. Pedigree - Selected from the wild in New York. Fruit: cluster exceptionally large, berries somewhat smaller than Adams 1. Plant: only partially self-fruitful, cross pollination required, during autumn, bark of mature stems is reddish, strong, vigorous, somewhat more productive than Adams Brooks and Olmo, 1972.

The following were developed by Cornell University, New York Agric. Exp. Station, Geneva, New York 14456, United States. Donated by Richard H. Converse, USDA/ARS, Oregon State University, Dept. Botany & Plant Pathology, Corvallis, Oregon, United States. Received 10/03/1991.

PI 652810. *Sambucus canadensis* L.

Cultivar. "York"; CANADA SAM0107; CSAM 77. Pedigree - Adams II x Ezyoff. Fruit: cluster heavy, berry large, during a 4-year period, averaged only 9.9% soluble solids, about 3% less than Johns, Scotia, and Victoria, ripens after Adams 1 and Adams 2. Plant: very large, more productive than Adams 1 and Adams 2. Brooks and Olmo, 1972. Considered to be one of the best cultivars of elderberry.

The following were developed by E.L. Eaton. Donated by Richard H. Converse, USDA/ARS, Oregon State University, Dept. Botany & Plant Pathology, Corvallis, Oregon, United States. Received 10/03/1991.

PI 652811. *Sambucus canadensis* L.

Cultivar. "Kent"; CANADA SAM0104; CSAM 79. Pedigree - OP seedling of Adams. Fruit: size and quality equal to Adams but ripens 7-10 days earlier. Plant: vigorous, productive. Brooks and Olmo, 1972.

The following were collected by Margie Luffman, Agriculture Canada, Canadian Clonal Genebank, Smithfield Experiment Station, Trenton, Ontario K8V 5R5,

Canada. Donated by Richard H. Converse, USDA/ARS, Oregon State University, Dept. Botany & Plant Pathology, Corvallis, Oregon, United States. Received 10/03/1991.

PI 652812. *Sambucus canadensis* L.

Cultivar. "Maxima"; CSAM 80. Collected in Nova Scotia, Canada.
Developed in Uncertain. Pedigree - Uncertain.

The following were developed by E.L. Eaton. Donated by Richard H. Converse, USDA/ARS, Oregon State University, Dept. Botany & Plant Pathology, Corvallis, Oregon, United States. Received 10/03/1991.

PI 652813. *Sambucus canadensis* L.

Cultivar. "Nova"; CANADA SAM0112; CSAM 81. Pedigree - OP seedling of Adams II. Fruit: large, matures early and uniformly in the cluster, sweeter than Victoria and Kent, which it resembles. Plant: suckers easily, readily propagated by dormant cuttings of 1-year old canes. Brooks and Olmo, 1972.

The following were collected by Margie Luffman, Agriculture Canada, Canadian Clonal Genebank, Smithfield Experiment Station, Trenton, Ontario K8V 5R5, Canada. Donated by Richard H. Converse, USDA/ARS, Oregon State University, Dept. Botany & Plant Pathology, Corvallis, Oregon, United States. Received 10/03/1991.

PI 652814. *Sambucus canadensis* L.

Cultivar. "Johns"; CANADA SAM0113; CSAM 82. Collected in Nova Scotia, Canada. Developed in Uncertain. Pedigree - Uncertain.

The following were developed by E.L. Eaton. Donated by Richard H. Converse, USDA/ARS, Oregon State University, Dept. Botany & Plant Pathology, Corvallis, Oregon, United States. Received 10/03/1991.

PI 652815. *Sambucus canadensis* L.

Cultivar. "Scotia"; CANADA SAM0105; CSAM 83. Pedigree - OP seedling of Adams II. Fruit: large, ripens early and uniformly in the cluster, sweeter than Kent and Victoria, which it resembles. Plants: Suckers easily propagated by dormant cuttings of 1-year old canes. Brooks and Olmo, 1972.

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 652816. *Sambucus wightiana* Wall. ex Wight & Arn.

Uncertain. CSAM 84. Collected in Pakistan. Pedigree - Uncertain.
Improvement status unspecified.

PI 652817. *Sambucus australis* Cham. & Schltdl.

Uncertain. CSAM 85. Collected in Uruguay. Pedigree - Uncertain.
Improvement status unspecified.

The following were developed by Lab. for Fruit Tree Genetics & Breeding, Research Inst. for Fruit Growing, Trustul Pomiculturii, Pitesti-Maracineni, Arges 0300, Romania. Donated by Lon J. Rombough, 13113 Ehlen Road, P.O. Box 365, Aurora, Oregon 97002, United States. Received 04/07/1992.

PI 652818. *Sambucus ebulus* L.

Cultivar. "Schit"; CSAM 93. Pedigree - Uncertain.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States; Ted Mackey, Horticultural Crops Research Laboratory, 3420 Orchard St., Corvallis, Oregon 97330, United States; Herb Hoover, University of Minnesota, St. Paul, Minnesota, United States; Rick Harrison, University of Minnesota, Department of Horticultural Science, 1970 Folwell Avenue, St. Paul, Minnesota 55108-6007, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 08/31/1993.

PI 652819. *Sambucus* sp.

Wild. CSAM 97. Collected 08/09/1993 in Washington, United States. Latitude 48° N. Longitude 124° W. Elevation 380 m. T30N R10W Sec. 1 & 12; Olympic National Forest, along FR 3040. Older clear cut on north side of road. Typical coastal forest. Lots of *R. spectabilis* and *G. shallon*.

PI 652820. *Sambucus racemosa* var. *arborescens* (Torr. & A. Gray) A. Gray

Wild. CSAM 98. Collected 08/09/1993 in Washington, United States. Latitude 48° 30' N. Longitude 121° 20' W. Elevation 460 m. T38N R9W Sec. 19; Mt. Baker-Snoqualmie Nat'l Forest, in vicinity of Baker Lake. Site approx. 1.6 km long along FR 1130. Slide and clear cut area, steep grade, moist area, vegetation thick.

PI 652821. *Sambucus cerulea* Raf.

Wild. CSAM 99. Collected 08/12/1993 in Washington, United States. Latitude 48° 30' N. Longitude 120° 30' W. Elevation 0 m. T36N R19W Sec. 29; Okanogan Nat'l Forest, Early Winters creek, along FR 5301300, Klipchuck NFS Campground off WA 20. Typical stream environment, moist.

PI 652822. *Sambucus cerulea* Raf.

Wild. CSAM 100. Collected 08/12/1993 in Washington, United States. Latitude 48° 30' N. Longitude 120° 30' W. Elevation 732 m. T36N R20E Sec. 29; Okanogan Nat'l Forest, from Mazama take FR 1163 SE to FR 52 along swithbacks. Outstanding ornamental set of plants. Very blue glaucous fruit. Growing well on very dry hillside.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States; Herb Hoover, University of Minnesota, St. Paul, Minnesota, United States; Rick Harrison, University of Minnesota, Department of Horticultural Science, 1970 Folwell Avenue, St. Paul, Minnesota 55108-6007, United States. Donated by

Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 08/31/1993.

PI 652823. *Sambucus cerulea* Raf.

Wild. CSAM 101. Collected 08/14/1993 in Washington, United States. Latitude 47° 40' N. Longitude 121° W. Elevation 575 m. T27N R16E Sec. 15; Wenatchee Nat'l Forest, US 2 north on WA 207 to FR 6500, S on FR 6500 approx. 1.6 km to White R. Four feet below road bed area is almost marshy due to wondering river, but plants on edge of road out of river bottom.

PI 652824. *Sambucus cerulea* Raf.

Wild. CSAM 102. Collected 08/16/1993 in Washington, United States. Latitude 46° 39' 25" N. Longitude 121° 21' 55" W. Elevation 1295 m. Wenatchee National Forest. From US 12, at Dog Lake NFS From US 12, at Dog Lake NFS campground on unmarked trail around south side of lake. T14N R11E Sec 36. Lewis County. High elevation, moist, associated with *Ribes* sp. (*R. viscosissimum* ?) and *Sambucus cerulea*. High elevation, moist, too shady for good fruit production.

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 652825. *Sambucus* sp.

Cultivar. "Haschberg"; CSAM 103.

PI 652826. *Sambucus* sp.

Cultivar. "Korsor"; CSAM 104.

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 652827. *Sambucus racemosa* L.

Wild. Anton Larsen KHCW 96-20-02; KHCW 96-20-02; CSAM 105. Collected 08/03/1996 in Alaska, United States. Latitude 57° 51' 53" N. Longitude 152° 40' 14" W. Elevation 48 m. about 0.5 mile on trail past the road going around Anton Larsen Bay. Open sun near edge of road. Associated vegetation: *Rosa woodsii*, *Spirea belbardiana*, *Veratum viride*, *Epilobium angustifolium*, *Trentellia europaea*, *Salix alaxensis*, *Viola*. Pedigree - open pollinated seed of wild *S. racemosa*.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Sheng Ke Xi, The Chinese Academy of Forestry, Beijing, Beijing, China; Qinghua Zhang, Institute of Forest Ecology and Environment, Chinese Academy of Forestry, Wan Shou Shan, Beijing, Beijing

100091, China. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/24/1996.

PI 652828. *Sambucus racemosa* f. *stenophylla* (Nakai) H. Hara
Wild. 96003; CSAM 106. Collected 07/18/1996 in Heilongjiang, China.

PI 652829. *Sambucus williamsii* Hance
Wild. 96051; CSAM 107. Collected 08/01/1996 in Jilin, China.

PI 652830. *Sambucus williamsii* Hance
Wild. 96076; CSAM 109. Collected 08/05/1996 in Jilin, China.

The following were collected by Donna Rae McKay, USDA Forest Service, Forest Resources Bldg, Corvallis, Oregon 97331, United States. Received 03/19/1998.

PI 652831. *Sambucus racemosa* L.
Wild. CSAM 110. Collected 09/1986 in Alaska, United States. Pedigree - Collected from the wild in Alaska.

PI 652832. *Sambucus racemosa* L.
Wild. CSAM 111. Collected 08/1987 in Oregon, United States. Pedigree - Collected from the wild in Oregon.

PI 652833. *Sambucus racemosa* L.
Wild. CSAM 112. Collected 07/11/1989 in Oregon, United States. Pedigree - Collected from the wild in Oregon.

The following were collected by Tom Antonio, Chicago Botanic Garden, Chicagoland Grows, P.O. Box 400, Glencoe, Illinois 60022, United States. Donated by USDA, ARS, NCRPIS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 07/27/1998.

PI 652834. *Sambucus racemosa* subsp. *sibirica* (Nakai) H. Hara
Uncertain. 1571-84; CSAM 137; Ames 4961. Collected 1984 in Yakutia-Sakha, Russian Federation.

The following were collected by Douglas Cook, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/11/1998.

PI 652835. *Sambucus cerulea* Raf.
Wild. CSAM 138. Collected 09/10/1998 in Oregon, United States. Latitude 44° 5' 59" N. Longitude 123° 7' 25" W. Elevation 80 m. East of Taco Bell restaurant parking lot on Division road, east of River road, Eugene, Oregon. In undeveloped field between retail shopping centers and residential housing. Open field with grasses and *Rubus procerus*. Pedigree - Collected from the wild in Oregon.

The following were collected by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/05/1999.

PI 652836. *Sambucus nigra* L.

Cultivated. *S. nigra* cv. Albo-variegata; CSAM 139. Collected 08/05/1999 in Oregon, United States. Elevation 0 m. Central Park, Corvallis, Benton county, Oregon. Pedigree - Cultivated plant in city park.

The following were collected by James F. Hancock, Michigan State University, Department 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, USDA-ARS-HCRL, 3420 Orchard St., 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 10/23/1996.

PI 652837. *Sambucus* sp.

Wild. NAH 106; CSAM 140. Collected 03/1996 in Tungurahua, Ecuador. Latitude 1° 14' 10" S. Longitude 78° 37' 1" W. Elevation 0 m. Harvested from tree in front of Ambato Hotel in Ambato, Ecuador. Pedigree - Collected from the wild in Ecuador.

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 652838. *Sambucus racemosa* L.

Wild. HVSC-005; CSAM 147. Collected 08/09/2001 in Primorye, Russian Federation. Latitude 44° 17' 19" N. Longitude 133° 39' 8" E. Elevation 396 m. 15 km east of Dostoyevka in the Yakovlesky district, Elovoy pass area. 50% exposure, 45 degree slope, northeastern exposure, gravel loam soil texture, drainage 4 out 5 (1 poor), woodland edge at pull off on side of road to the north-east, associated with populus, *Urtica dioica*, *Betula*, *Rubus crataegifolius*. Pedigree - Collected from the wild in Primorye, Russian Federation.

PI 652839. *Sambucus racemosa* L.

Wild. HVSC-012; CSAM 148. Collected 08/10/2001 in Primorye, Russian Federation. Latitude 44° 22' 34" N. Longitude 134° 39' 10" E. Elevation 377 m. Near Shumny, Campio area. exposure 40%, dense woods, associated vegetation *Aralia*, *Vitis amurensis*, *Sorbaria*, *Fragaria orientalis*. Pedigree - Collected from the wild in Primorye, Russian Federation.

PI 652840. *Sambucus racemosa* L.

Wild. HVSC-015; CSAM 149. Collected 08/10/2001 in Primorye, Russian Federation. Latitude 44° 29' 41" N. Longitude 135° 23' 12" E. Elevation 673 m. 14 km southwest of Danegorsk, near Vysokogorsky pass. Open exposure, overlook across mountains, gravel sand soil texture, very good drainage (5 of 5) associated vegetation Sorbaria, Soligago, Alnus, Geum, Populus. Pedigree - Collected from the wild in Primorye, Russian Federation.

PI 652841. *Sambucus racemosa* L.

Wild. HVSC-023; CSAM 150. Collected 08/10/2001 in Primorye, Russian Federation. Latitude 44° 41' 9" N. Longitude 135° 35' 31" E. Elevation 794 m. 12 km north east of Dalnegorsk, north fork of the Red river (Krasnaya river), through forest near road, in clearing throughout forest. Hilly mountains, duff humus on clay, drainage 2 of 5(1 poor) associated with Larex, Schuzandra chunensis, white birch for forest, corylus, actinidia, Fragaria orientalis. Pedigree - Collected from the wild in Primorye, Russian Federation.

The following were collected by Patricia Holloway, University of Alaska - Fairbanks, Georgeson Botanical Garden, 117 West Tanana Drive, Fairbanks, Alaska 99775, United States. Received 04/24/2000.

PI 652842. *Sambucus racemosa* subsp. *pubens* (Michx.) House

Wild. CSAM 152. Collected 08/23/1999 in Alaska, United States. Elevation 0 m. Sitka Harbor. abandoned field. Pedigree - Collected from the wild in Alaska.

The following were collected by Charles Tubesing, The Holden Arboretum, 9500 Sperry Road, Kirtland, Ohio 44094-5172, United States; Paul Meyer, The University of Pennsylvania, Morris Arboretum, 9414 Meadowlark Avenue, Philadelphia, Pennsylvania 19118, United States; Jeff Lynch, Longwood Gardens, P.O. Box 501, Kennett Square, Pennsylvania 19348, United States; Peter del Tredici, The Arnold Arboretum, Harvard University, 125 Arbor Way, Jamaica Plain, Massachusetts 02130-3159, United States; Cao Wei, Shenyang Institute of Applied Ecology, 72 Whenhua Road, Shenyang, China; Zhao Shuqing, Shenyang Institute of Applied Ecology, 72 Whenhua Road, Shenyang, China; Sheng Ning, Nanjing Botanical Garden, Box 1435, Nanjing, Jiangsu 210014, China; Zhong Linsheng, Shenyang Institute of Applied Ecology, 72 Whenhua Road, Shenyang, China; Kris Bachtell, The Morton Arboretum, 4100 Illinois Route 53, Lisle, Illinois 60532-1293, United States; Wang Xianli, Shenyang Institute of Applied Ecology, China; Sun Long Xing, Forestry Department, Changbai Xian, China. Received 10/01/1997.

PI 652843. *Sambucus williamsii* Hance

CBS 036; NA 68795. Collected 10/01/1997 in Jilin, China. Latitude 41° 45' 23" N. Longitude 128° 2' 35" E. Elevation 1490 m. Changbai County. Moist woodland edge under Chosenia arbutifolia, Picea jezoensis and Betula costata; 50% slope. Pedigree - Collected from the wild in Jilin, China.

The following were donated by Hakan Schuberg, Gluntens Vag 9-807, Umea, Vasterbotten 903 31, Sweden. Received 12/31/2002.

PI 652844. *Sambucus williamsii* Hance

Uncertain. CSAM 156; *S. williamsii* - Sweden; Index Seminum 2002 #42.
Collected in Vasterbotten, Sweden. Elevation 0 m. Pedigree - Collected from the wild in Sweden.

The following were donated by James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 07/18/2003.

PI 652845. *Sambucus nigra* L.

Cultivar. "Purpurea"; CSAM 157. Pedigree - Selection of *nigra* with variegated pink flowers. *Sambucus nigra* cv. *Purpurea* - This is the old standard purple clone of Elderberry. Obtained from the North Willamette Research and Extension Center. A new cultivar called 'Black Beauty' has been released and 'Purpurea' is going by the wayside. *Purpurea* is a beautiful shrub. Its leaves first emerge as green, but quickly turn a shiny purple-black for most of spring (for all of spring if they get a bit of shade). But come warm weather, they turn olive green. This is supposed to be a 'fault' in that the purple doesn't last through summer, whereas Black Beauty leaves do stay purple until autumn colors supplant the purply-black. Jim Oliphant, July 2003.

PI 652846. *Sambucus racemosa* L.

Cultivar. "Southerland Gold"; CSAM 158. 'Southerland Gold' - Creamy yellow clusters of bloom in May are followed by red fruit. Foliage is finely cut, golden yellow. Growth to 2 or 3 meters. Generally grown and pruned for foliar growth rather than for fruiting. SUGGESTED USE: In shrub border, to attract birds, as specimen planting. CULTURE: Full to partial sun. Not fussy about soil; average garden soil is fine. Space 8 feet apart. Prune hard in late winter to get the brightest foliage. PROBLEMS: Generally free of insect or disease problems.

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 652847. *Sambucus racemosa* L.

Wild. *S. racemosa* J21; HD-2004-21; CSAM 159. Collected 07/12/2004 in Hokkaido, Japan. Latitude 43° 34' 11" N. Longitude 141° 56' 25" E. Elevation 46 m. Hokkaido Plant Genetic Resources Center in Takikawa. Hedge row to field of PGR Center field facing west to open field. Associated species: *Picea yezoensis*, *Morus australicus*, *Polygonum*, *Artemisia* and Bamboo. Pedigree - Collected from the wild in Hokkaido, Japan. open pollinated seed from two trees. 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. Umbels from two trees were collected. Red fruits were about 2 mm diameter.

PI 652848. *Sambucus racemosa* L.

Wild. *S. racemosa* J84; HD-2004-84; CSAM 160. Collected 07/21/2004 in Hokkaido, Japan. Latitude 42° 48' 42" N. Longitude 143° 28' 45" E. Elevation 17 m. Akkeshi-wan peninsula growing along the road. Swampy area, drainage ditch. Associated species: *Humulus japonicus*, *Alnus*, *Salix* 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 Research Service, USA, prepared in May 2004.

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 10/13/2005.

PI 652849. *Sambucus canadensis* L.

Cultivar. "Serendio"; CSAM 161.

PI 652850. *Sambucus canadensis* L.

Cultivar. "Voltra"; CSAM 162.

PI 652851. *Sambucus canadensis* L.

Cultivar. "Norma"; CSAM 163.

PI 652852. *Sambucus canadensis* L.

Cultivar. "Walleye"; CSAM 164.

PI 652853. *Sambucus canadensis* L.

Cultivar. "Southwest Center"; CSAM 165.

PI 652854. *Sambucus canadensis* L.

Cultivar. "Arlene"; CSAM 166.

PI 652855. *Sambucus canadensis* L.

Cultivar. "Marion"; CSAM 167.

PI 652856. *Sambucus canadensis* L.

Cultivar. "Gordon B"; CSAM 168.

PI 652857. *Sambucus canadensis* L.

Cultivar. "Netzer"; CSAM 169.

Unknown source. Received 05/11/2007.

PI 652858. *Sambucus nigra* L.

Cultivar. "Samdal"; CSAM 179.

Unknown source. Received 07/15/2007.

PI 652859. *Sambucus canadensis* L.

Wild. HDF-2007-119; CSAM 181; *S. canadensis* Watertown. Collected 07/13/2007 in South Dakota, United States.

The following were developed by USDA, ARS, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Donated by Hortus Botanicus Academie Scientiarum, Taschkent, Karamurtakaja, Tashkent, Uzbekistan. Received 04/24/1990.

PI 652860. *Sorbus aria* (L.) Crantz

Cultivated. CSOR 117. Pedigree - Open-pollinated seed from botanical collection. (This accession was part of the PL,SD 'breakout' - 1992).

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 652861. *Sorbus sambucifolia* (Cham. & Schltdl.) M. Roem.

Wild. 1SOR; CSOR 297; AG 74. Collected 10/23/1999 in Alaska, United States. Latitude 52° 57' N. Longitude 173° 18' 23" E. Elevation 0 m. Attu Island, western tip of the Aleutian Islands. Pedigree - Collected from the wild in Alaska.

PI 652862. *Sorbus sambucifolia* (Cham. & Schltdl.) M. Roem.

Wild. 3SOR; CSOR 299; AG 30. Collected 10/17/1999 in Alaska, United States. Latitude 52° 57' N. Longitude 173° 18' 23" E. Elevation 0 m. Attu Island, western tip of the Aleutian Islands. Pedigree - Collected from the wild in Alaska.

The following were collected by Donna Rae McKay, USDA Forest Service, Forest Resources Bldg, Corvallis, Oregon 97331, United States. Received 03/19/1998.

PI 652863. *Sambucus* sp.

Wild. CSAM 113. Collected 09/1985 in Oregon, United States. Pedigree - Collected from the wild in Oregon.

The following were collected by Ann Saam, USDA, NRCS, Texas Field Office, Mt. Pleasant, Texas, United States. Received 01/16/2008.

PI 652864. *Dichanthelium scoparium* (Lam.) Gould

Cultivar. "Pilgrim Germplasm velvet panicum"; 9057334. Collected 06/14/1990 in Texas, United States. Latitude 33° 0' 15" N. Longitude 94° 55' W. Pittsburg Township in Camp County. The collection site is in MLRA 133B. Bowie fine sandy loam with average yearly precipitation of 48 inches. Developed in United States. Pedigree - Selected from among thirty-three collections (33) of *Dichanthelium* spp. collected from 16 counties in Major Land Resource Areas 133B, 87, and 152B in the USDA/NRCS East Texas Plant Materials Center (PMC) service area (USDA, NRCS East Texas Plant Materials Center, 1993). Collections were evaluated for vigor, seed and foliage height, and foliage width from 1993-1995 at the East Texas PMC, Nacogdoches, Texas. Pilgrim Germplasm

exhibited better vigor than 'Tioga', the commercial standard in initial evaluation. From the initial evaluation, Pilgrim Germplasm along with five other accessions was chosen for further evaluation because of its sustained performance in vigor (USDA, NRCS East Texas Plant Materials Center, 1997). Pilgrim Germplasm was observed to exhibit better drought tolerance and seed production than the other accessions. Pilgrim Germplasm velvet panicum is a short lived perennial bunchgrass. A basal rosette is produced in late fall or early winter and stems begin growth in the spring. The erect, coarse, thick culms grow to a height of 60 inches. The lower culm internodes, sheaths, and blades are very pubescent while the upper culms and leaves are moderately pubescent to glabrous. An open seed panicle is produced in the summer and a closed spikelet is produced in the fall. This plant tends to flower later when growing in association with other Dichantheliums. Dichanthelium scoparium frequently grows in open or partially open areas along moist ditches and swales in sandy soils (Gould and Clark, 1978).

The following were developed by C. Wayne Smith, Texas A&M University, Department of Soil and Crop Sciences, 2474 TAMUS, College Station, Texas 77843-2474, United States; E. Hequet, Texas Tech University, International Textile Center, Lubbock, Texas 79409-5888, United States; Peggy Thaxton, Delta Research and Extension Center, PO Box 197, Stoneville, Mississippi 38776, United States; D.C. Jones, Cotton Incorporated, 6399 Weston Parkway, Cary, North Carolina 27513, United States; Steve Hague, Texas A&M University, Soil & Crop Science Dept., College Station, Texas 77845, United States. Received 01/31/2008.

PI 652865. *Gossypium hirsutum* L.

Breeding. Pureline. TAM 01E-22. GP-889. Pedigree - TAM 94L-25 (PI 631440) // 92Z-32-1/88F-28. Exhibits longer UHM length through a longer fiber length development period than Fiber Max 832 or TTU 202. Exhibits better combining ability for improved fiber length than Fiber Max 832 or TTU 202. In testing over 8 locations and 3 years in central and south Texas, TAM 01E-22 produced less lint yield per acre than Fiber max 832 or PSC 355 but averaged higher, $p=0.05$, HVI fiber bundle strength at 33.9 g/tex and produced fibers with UHM length 7 and 16% longer than Fiber Max 832 and PSC 355, respectively.

The following were developed by James L. Brewbaker, University of Hawaii, Dept. of Horticulture, 3190 Maile Way, Honolulu, Hawaii 96822, United States. Received 02/01/2008.

PI 652866. *Zea mays* L. subsp. *mays*

Cultivar. Population. "HIC1". CV-2. Pedigree - Derived in 1967 from the Maize Genetic Coop's stock 65F-409-1/410-1 on a dent background. Crossed in Thailand with a Rockefeller Foundation o2 composite. Following 2 cycles of recurrent mass selection in Thailand, it was crossed with an o2 sister-line hybrid of B37 x H84 and backcrossed. Composite homozygous for the high-lysine gene opaque-2 based on 27 cycles of recurrent selection. Genetic makeup approx. 3/8 Thai composite, 3/8 genetic stock and 2/8 B37/H84 (3/8 tropical, 5/8 temperate). The Ht gene sought from H84 for tolerance of blight [*Exserohilum terrecicum*] was shown to be overcome by racial variation of this pathogen in the topics, but the B37 and H84 inbreds conferred other agronomically desirable traits. Population was then carried through 15 cycles of recurrent mass se

lection in Hawaii, 5 with selection of both parents (prior to pollination) and 10 with selection only following open-pollination. Intensive selection was made for tolerance to kernel and ear rots due to *Fusarium verticillioides* that are severe on soft-kerneled floury genotypes. HIC1 is relatively flinty, evident in outcrosses and clearly distinguishable from o2 dents. Many cycles of selection were grown under high disease pressure in Hawaii for maize mosaic virus, common and southern rusts, turcicum blight, and insect pressures from earworms.

PI 652867. *Zea mays* L. subsp. *mays*

Cultivar. Population. "HIC2". CV-3. Pedigree - Composite based on hybrids with perennial teosinte, *Zea diploperennis*, followed by 5 cycles of recurrent selection. 22 inbreds (Hi25 to Hi35) were crossed by Srinivasan to teosinte as male parent. These highly-tillered hybrids (average 5.4 tillers) were backcrossed to the 11 parents (4 temperate and 7 tropical). Backcrosses separated into A & B groups that were inter-crossed in 1987 to establish the composite which has been advanced by recurrent mass selection for 5 generations. The composite segregates widely for morphological traits and for ear traits. Has been advanced without stringent selection for plant or ear type. Has not segregated perennial plants which is surmised to be related to the fact that the population has the maize cytoplasm. Tillering and flag-leaf development occur together in about 10% of the plants.

PI 652868. *Zea mays* L. subsp. *mays*

Cultivar. Population. "HIC3". CV-4. Pedigree - A variegated-pericarp (p-vv) genetic stock was crossed with tropical inbred Hi27 and hybrids were crossed with a temperate "Indian corn" composite of Dr. H.E. Brewbaker in 1969. Following 3 cycles of selection, the population was crossed to a Hawaiian population with monogenic resistance to turcicum blight and common rust, then backcrossed 4 times selecting for rust and blight immunity. The immunities did not survive evolution of the pathogens in Hawaii but composite continued to be advanced for agronomic traits through 17 generations. In 2002 was crossed with a variegated (p-vv) commercial popcorn, backcrossed twice, and advanced through 3 cycles of recurrent mass selection. Population is tall, ears are high and kernels are flinty; does not have high tolerance of southern rust. Estimated phenotypic frequencies include 80% white endosperm, 15% red/purple aleurone, 10% variegated pericarp, 8% red pericarp, 5% bronze aleurone, 5% sugary or brittle-1 endosperm, 2% purple plant, and 2% opaque-2 endosperm.

PI 652869. *Zea mays* L. subsp. *mays*

Cultivar. Population. "HIS1". CV-5. Pedigree - Inbred parents: B77, CM103, CIMMYT11ES, Hi28, Hi34, Hi53, Hi54, Hi56, Hi61, ICAL29, ICAL36, ICAL219, ICAL220 and INV534. Later evaluations showed resistance of B77 to be racially specific; other inbreds had racially non-specific tolerance. Population advanced by recurrent mass selection for 6 cycles in Hawaii. Newly identified or improved inbreds with high blight tolerance were crossed with this synthetic in 2006. Inbreds in 2nd series included new versions of Hi28, Hi34, Hi53, Hi56 together with Hi40, Hi48, Hi49, Hi51, Hi52, Hi57, Hi58, Hi61. Population advanced for 2 more cycles under blight infections prior to release. Inbred-based synthetic bred for high general resistance of Northern blight [*Exserohilum turcicum*]. Evaluations were made at Mealani Research Station on the Island of Hawaii at 2700 ft. elevation, where this disease is severe annually.

PI 652870. *Zea mays* L. subsp. *mays*

Cultivar. Population. "HIS2". CV-6. Pedigree - Group A parents: CIMMYT A21, CIMMYT T11, Hi33, Hi47, Hi49, ICAL221, INV534 and Ky226 crossed in 1986 with Group B parents: B77, CI66, CM103, H55, Hi26, Hi28, Hi29, Hi31, Hi34 and Tx601. Synthetic based on 18 inbreds with superior general combining ability (GCA). Parentage was about 50% temperate; performance should optimize in subtropical regions like Hawaii. Advanced through 5 cycles of recurrent selection, has excellent form and agronomic traits in Hawaii.

PI 652871. *Zea mays* L. subsp. *mays*

Cultivar. Population. "HIS3". CV-7. Pedigree - Inbred parents with general resistance to Southern rust (*Puccinia polysora*): CIMMYTT-11, Fla2AT115, Hi34, ICAL210, ICAL219, ICAL223, INV138, INV534, Ki9, MIT2, Narino330, SC55, TZi4, TZi10, TZi11, TZi12, TZi14, TZi15 and TZi30 (1 temperate; 18 tropical). The intercrossed population was advanced by recurrent mass selection for 3 cycles in Hawaii with emphasis on improvement of agronomic traits. Very high tolerance of rust has been verified in disease nurseries in which susceptible temperate hybrids failed to produce grain. Proved outstanding in yield.

PI 652872. *Zea mays* L. subsp. *mays*

Cultivar. Population. "HIS4". CV-8. Pedigree - Inbred parents chosen for general resistance to common rust: B84, CIMMYT T11, CM118, Fla2AT115, Hi28, Hi32, Hi33, Hi34, Hi40, Hi41, ICA27, ICA219, ICA223, Ki9, Ki14, MIT2, Narino 330 and Oh43 (5 temperate, 13 tropical). The intercrossed population was advanced by recurrent mass selection for 3 cycles in Hawaii with emphasis on improvement of agronomic traits. Inbred-based synthetic developed with high general resistance of common rust (*Puccinia sorghi*). High tolerance of the common rust races present in Hawaii has been verified in several disease nurseries, and it has been outstanding in yield. None of the Ht loci for specific resistance to common rust are effective in Hawaii.

PI 652873. *Zea mays* L. subsp. *mays*

Cultivar. Population. "HIS5". CV-9. Pedigree - Inbred parents for general resistance to Southern blight: Fla2AT114, Fla2AT115, Fla2AT116, Fla2BT73, Fla2BT106, Hi35, Hi39, ICAL221, INV534, Ki9, Ki14, TZi3, TZi5, TZi11 (5 temperate, 9 tropical). The intercrossed population was advanced by recurrent mass selection for 6 cycles in Hawaii with emphasis on improvement of agronomic traits. Inbred-based synthetic developed with high general resistance to Southern blight [*Bipolaris maydis*].

PI 652874. *Zea mays* L. subsp. *mays*

Cultivar. Population. "HIS6". CV-10. Pedigree - Inbred parents: CML223, CML295, FW1, FW6, Hi26, Hi28, Hi34, Hi41, Hi42, Hi43, Hi44, Hi45, Hi46, Hi47, Hi49, Hi50, Hi51, Hi52, Hi53, Hi54, Hi56, Hi57, Hi58, Hi59, Hi60, Hi61, Hi62, Hi63, Hi64, Hi65, Hi66, Hi67, Hi68, KS23 (3 sublines), MF6 ad ZH1 (10temperate, 28 tropical). All were resistant to Maize Mosaic Virus and to other diseases common in our breeding nurseries. The intercrossed population has been advanced by recurrent mass selection for 3 cycles in Hawaii, with emphasis on improvement of agronomic traits. Synthetic based on 38 inbreds with superior agronomic traits and hybrid performance in Hawaii.

The following were developed by Seminis Vegetable Seeds, Inc., Woodland, California, United States. Received 01/24/2008.

PI 652875 PVPO. Cucumis melo L.
Cultivar. "WSH 39-1066 AN". PVP 200800071.

The following were developed by Syngenta Seeds, Inc., Slater, Iowa 50244, United States. Received 01/22/2008.

PI 652876 PVPO. Zea mays L. subsp. mays
Cultivar. "NP2457". PVP 200800042.

PI 652877 PVPO. Zea mays L. subsp. mays
Cultivar. "NPAX5290". PVP 200800043.

PI 652878 PVPO. Zea mays L. subsp. mays
Cultivar. "NPFA7183". PVP 200800044.

PI 652879 PVPO. Zea mays L. subsp. mays
Cultivar. "NPID3477". PVP 200800045.

PI 652880 PVPO. Zea mays L. subsp. mays
Cultivar. "NPXA5489". PVP 200800046.

PI 652881 PVPO. Zea mays L. subsp. mays
Cultivar. "NPXA5599". PVP 200800047.

The following were developed by Oregon State University, Corvallis, Oregon, United States. Received 01/28/2008.

PI 652882 PVPO. Solanum tuberosum L.
Cultivar. "WALLOWA RUSSET". PVP 200200252.

The following were donated by Peter Oldenkamp, Handelmaatschappij Van Rijn bv, P.O. Box 6, S-Gravenzande, Netherlands. Received 12/15/2000.

PI 652883 PVPO. Solanum tuberosum L.
Cultivar. "Inova"; Q 42978; Q 43047. PVP 200200253.

The following were developed by Peter Oldenkamp, Handelmaatschappij Van Rijn bv, P.O. Box 6, S-Gravenzande, Netherlands. Received 02/06/2008.

PI 652884 PVPO. Zea mays L. subsp. mays
Cultivar. "EXEMPLA". PVP 200200254.

The following were collected by Robert Hrastar, Slovenian Institute of Hop Research and Brewing, Department for Agrochemistry & Brewing Science, Cesta Zalskega tabora 2, Zalec, Slovenia. Received 12/11/2007.

PI 652885. Camelina sativa (L.) Crantz
Landrace. 1; Ames 29309. Collected 2007 in Slovenia. Latitude 46°

32' 41" N. Longitude 14° 57' 43" E. Approximately 5 km from Ravne na Koroskem.

PI 652886. *Camelina sativa* (L.) Crantz

Landrace. 4; Ames 29310. Collected 2007 in Slovenia. Latitude 46° 32' 41" N. Longitude 14° 57' 43" E. Approximately 5 km from Ravne na Koroskem.

The following were developed by Dennis West, University of Tennessee, Department of Plant Sciences, 350 Plant Sciences, Knoxville, Tennessee 37996-4562, United States. Received 02/08/2008.

PI 652887. *Zea mays* L. subsp. *mays*

Breeding. Pureline. T177. Pedigree - {[A632/(T232/Mp339)]-S6/[B73/Ga209-S2//(B37/Mo18W-S3//B73)-S6]}-S9. T177 is a white grain line. It is a full season line in Tennessee, rated 1100 in the AES system. Heat units to pollen shed were 1472 for T177, compared to 1406 for Mo17 in 2005. Plant and ear height of T177 were 1.55 and 0.67 m, compared to 1.98 and 1.00 m for Mo17. The plants produce yellow anthers and green silks. T177 produces a large ear with 14 rows of medium sized kernels on a white cob. Grain color is slightly off-white.

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 02/08/2008.

PI 652888. *Beta vulgaris* L. subsp. *vulgaris*

Breeding. Pureline. CR11-6; CR711-6. Pedigree - CR11-6 is 2nd bulk increase from one half-sib family from population CR11 (PI 636343). After one cycle of S1 progeny selection in CR11, half-sib (HS) families were extracted (1 aa-plant x popn-CR11Aa). These HSs were evaluated for yield components under nondiseased, rhizomania, cercospora leaf spot, and bolting conditions. Line CR11-6 was selected on the basis of sugar yield, sucrose concentration, and resistance to Cercospora, rhizomania, and bolting. CR11-6 will be a mix of selfed and sibbed matings. CR11-6 is a moderately based germplasm. In tests at Salinas, CA, Fort Collins, CO, East Lansing, MI, and Shakopee, MN it had moderate-high resistance to cercospora leaf spot (*Cercospora beticola*). It segregates for hypocotyl color (R:rr), genetic male sterility (A:aa), and resistance to rhizomania (Rz1:rz1rz1) caused by Beet necrotic yellow vein virus. It has moderate resistance to powdery mildew (*Erysiphe betae*) and good nonbolting tendency. It is moderately susceptible to curly top (Beet curly top virus). CR11-6 is intermediate in its reaction to *Aphanomyces*. CR11-6 has average sucrose concentration and its experimental hybrids had sugar yield equal to the mean of four current commercial hybrids grown in California under both rhizomania and nonrhizomania conditions. Resistance to cercospora leaf spot was at least partially derived (12.5% germplasm) from sugarbeet accessions obtained from Rovigo, Italy in 1989 from so-called Munerati and Alba material.

PI 652889. *Beta vulgaris* L. subsp. *vulgaris*

Breeding. Pureline. CR11-7; CR711-7. Pedigree - CR11-7 is the 2nd bulk increase of two S1 families from CR211-7. CR211-7 is the increase of one half-sib family extracted from populations CR11. The HS family was

selected for resistance to cercospora leaf spot and rhizomania. Plants of CR11-7 were selfed and the S1s evaluated for yield components under nondiseased, rhizomania, and cercospora leaf spot conditions. Two S1 families were selected based on these tests and increased in bulk to produce CR11-7. CR11-7 will be a mix of selfed, sibbed, and recombined matings from the two selfed lines. CR11-7 is a moderately narrow based germplasm. In tests at Salinas, CA, Fort Collins, CO, East Lansing, MI, and Shakopee, MN, it showed the highest resistance to cercospora leaf spot (*Cercospora beticola*) of any line developed at Salinas. CR11-7 segregates for resistance to rhizomania (Rz1:rz1rz1) caused by Beet necrotic yellow vein virus and genetic male sterility (A:aa). It has green hypocotyls (rr), multigerm seed (MM), and is self-fertile (Sf). It is moderately susceptible to curly top (Beet curly top virus) and moderately resistant to powdery mildew (*Erysiphe betae*). CR11-7 has an intermediate reaction to *Aphanomyces*. As a line it has a small, flat, smooth margin leaves with an upright, dark green canopy. It has average sucrose concentration and low sugar yield. In the absence of cercospora leaf spot and rhizomania, its experimental hybrids had intermediate sugar yield. Resistance to leaf spot was at least partially derived (12.5% of germplasm) from sugarbeet accessions obtained from Rovigo, Italy in 1989 from so-called Munerati and Alba material.

PI 652890. *Beta vulgaris* L. subsp. *vulgaris*

Breeding. Pureline. CR951-210; 7951-210. Pedigree - CR951-210 was derived from one S1 family from the F1 population hybrid between CR11 x Y090. Y090 is a multigerm, self-incompatible, composite line recombining full-sib selections from lines such as C78/2 (PI 593695), C82 (PI 593675), and C80 (PI 593672) that have been developed for combined resistances. CR11 (PI 636343) male sterile plants were topcrossed to virus yellows resistant line Y090. F1 plants were randomly selected and selfed. The ensuing S1 families were evaluated for components of sugar yield under nondiseased, rhizomania, cercospora leaf spot, virus yellows, and bolting conditions. One S1 line with high combining ability for sugar yield was selected and increased in bulk to produce CR951-210. CR951-210 is a narrowly based germplasm. In tests at Salinas, Fort Collins, East Lansing, Kimberly, and Shakopee, MN, it showed moderate resistance to cercospora leaf spot (*Cercospora beticola*). It is green hypocotyl colored (rr), multigerm (MM), self compatible (Sf), and segregates for genetic male sterility (A:aa) and resistance to rhizomania (Rz1:rz1rz1) caused by Beet necrotic yellow vein virus. It is moderately resistant to powdery mildew (*Erysiphe betae*) and moderately susceptible to curly top (Beet curly top virus). CR951-210 may be unique in combining resistance to cercospora leaf spot and nonbolting tendency with tolerance to virus yellows caused by combinations of Beet yellow virus and Beet chlorosis virus. Under diseased conditions it has good sugar concentration and high sugar yield combining ability. It should be adapted to the areas in California subject to *Cercospora*, rhizomania, curly top, virus yellows, and other diseases. About 6% of the germplasm of CR951-210 is from sugarbeet accessions obtained from Rovigo, Italy from so-called Munerati and Alba material.

PI 652891. *Beta vulgaris* L. subsp. *vulgaris*

Breeding. Pureline. CR933; 5933; Popn-933. Pedigree - C931 aa was back crossed with F1 hybrids between C931 (PI 636340) and partially pollen restored plants from hybrids Seedex Monohikari and Mono-Hy MH1632 and HM-IR4 as sources of improved performance and resistance to root aphids, *Cercospora*, and *Rhizoctonia*. Pollen fertile BC1F1 plants were

selfed. Selected BC1S1 families were recombined through aa plants to produce population-933. Following mother-root selections for resistance to rhizomania, popn-933 plants were selfed. After progeny tests under diseased (rhizomania, cercospora leaf spot, virus yellows) and nondiseased conditions, ten S1 families were selected and recombined with further improved population-933 to produce CR933. CR933 is a moderately based, multigerm (MM), self-fertile (Sf), genetic-male-sterile (A:aa) facilitated, random-mated population, which combines germplasm traits from traditional Salinas and Colorado breeding programs. CR933 is a population improved by both mother root and S1 progeny test selections. CR933 has fertile cytoplasm from C931 and segregates for genetic male sterility (A:aa) and hypocotyl color (R:rr). It segregates for resistance to rhizomania (Rz1) caused by Beet necrotic yellow vein virus. In tests at Salinas, CA, Fort Collins, CO, East Lansing, MI, and Shakopee, MN, it had moderate to good resistance to Cercospora beticola and intermediate reaction to Aphanomyces. It appeared to segregate at a low frequency for resistance to Rhizoctonia solani AG-2-2. CR933 segregates for resistance to root aphids (Pemphigus sp.). It is moderately resistant to powdery mildew (Erysiphe betae) and tolerant to virus yellows caused by Beet yellow virus and Beet chlorosis virus. In tests at Kimberly, ID it had intermediate reaction to curly top (Beet curly top virus). It has a dark green canopy with smooth leaf margins. As a line, CR933 has high sugar yield and intermediate to high sucrose concentration when grown under rhizomania and/or cercospora leaf spot conditions. Resistances to Cercospora, root aphids, and Rhizoctonia are likely from traditional USDA-Fort Collins and Great Western Sugar Company, Colorado germplasm that traces back to GW359 and GW674. It may or may not be different from the Cercospora resistance found in population CR11. CR933 should offer a source of combined disease and pest resistance in a background of potentially high productivity.

PI 652892. Beta vulgaris L. subsp. vulgaris

Breeding. Pureline. CR933-14; 4933-14. Pedigree - CR933-14 is the increase of one S1 family from an early, improved version of population-CR933. Population CR933 was developed at Salinas by combining Salinas germplasm similar to C931 (PI 636340) with Colorado germplasm including material descended from multigerm, open-pollinated lines GW359 and GW674 and commercial hybrid Monohikari. CR933-14 was selected following progeny and combining ability tests for components of sugar yield under healthy and diseased conditions, including rhizomania, cercospora leaf spot, and virus yellows. Released seed of CR933-14 was produced by harvesting seed from genetic male sterile plants within the line following two cycles of mother root selection for disease resistance, % sugar, and root conformation. CR933-14 is a narrowly based germplasm. It has normal, fertile cytoplasm from C931 and segregates for genetic male sterility (A:aa) and hypocotyl color (R:rr). It appears to be homozygous resistant to rhizomania (Rz1Rz1) caused by Beet necrotic yellow vein virus. It is self compatible (Sf). In tests at Salinas, CA, Fort Collins, CO, East Lansing, MI, and Shakopee MN, it had moderate resistance to Cercospora beticola and moderate susceptibility to Aphanomyces. It was susceptible to Rhizoctonia solani AG-2-2. CR933-14 segregates for reaction to root aphids (Pemphigus sp.). It is moderately resistant to powdery mildew (Erysiphe betae) and appears to be tolerant to virus yellows caused by both Beet yellow and Beet chlorosis viruses. In tests at Kimberly, ID it was intermediate in reaction to Beet curly top virus. As a line it is dark green, has a small canopy and low to moderate vigor with high sucrose concentration. It has moderate

nonbolting tendency. In experimentally hybrids, particularly under diseased conditions, it gives moderate to high sugar yield with high sugar concentration.

The following were developed by Pioneer Hi-Bred International, Inc., Johnston, Iowa 50131, United States. Received 02/12/2008.

PI 652893 PVPO. Glycine max (L.) Merr.
Cultivar. "93Y12". PVP 200800082.

PI 652894 PVPO. Glycine max (L.) Merr.
Cultivar. "93Y11". PVP 200800083.

PI 652895 PVPO. Glycine max (L.) Merr.
Cultivar. "92Y80". PVP 200800084.

PI 652896 PVPO. Glycine max (L.) Merr.
Cultivar. "92Y90". PVP 200800085.

PI 652897 PVPO. Glycine max (L.) Merr.
Cultivar. "93Y02". PVP 200800087.

PI 652898 PVPO. Glycine max (L.) Merr.
Cultivar. "93Y01". PVP 200800088.

PI 652899 PVPO. Glycine max (L.) Merr.
Cultivar. "92Y30". PVP 200800089.

PI 652900 PVPO. Glycine max (L.) Merr.
Cultivar. "95Y70". PVP 200800091.

PI 652901 PVPO. Glycine max (L.) Merr.
Cultivar. "93Y70". PVP 200800092.

PI 652902 PVPO. Glycine max (L.) Merr.
Cultivar. "93Y80". PVP 200800093.

PI 652903 PVPO. Glycine max (L.) Merr.
Cultivar. "93Y81". PVP 200800094.

PI 652904 PVPO. Glycine max (L.) Merr.
Cultivar. "93Y20". PVP 200800095.

PI 652905 PVPO. Glycine max (L.) Merr.
Cultivar. "93Y50". PVP 200800096.

PI 652906 PVPO. Glycine max (L.) Merr.
Cultivar. "94Y70". PVP 200800097.

PI 652907 PVPO. Glycine max (L.) Merr.
Cultivar. "94Y20". PVP 200800098.

PI 652908 PVPO. Glycine max (L.) Merr.
Cultivar. "94Y10". PVP 200800099.

PI 652909 PVPO. *Glycine max* (L.) Merr.
Cultivar. "94Y01". PVP 200800100.

PI 652910 PVPO. *Glycine max* (L.) Merr.
Cultivar. "93Y90". PVP 200800101.

PI 652911 PVPO. *Glycine max* (L.) Merr.
Cultivar. "95Y41". PVP 200800102.

PI 652912 PVPO. *Glycine max* (L.) Merr.
Cultivar. "91Y91". PVP 200800103.

PI 652913 PVPO. *Glycine max* (L.) Merr.
Cultivar. "92Y20". PVP 200800104.

PI 652914 PVPO. *Glycine max* (L.) Merr.
Cultivar. "91Y70". PVP 200800105.

PI 652915 PVPO. *Glycine max* (L.) Merr.
Cultivar. "90Y20". PVP 200800106.

PI 652916 PVPO. *Glycine max* (L.) Merr.
Cultivar. "90Y41". PVP 200800108.

PI 652917 PVPO. *Glycine max* (L.) Merr.
Cultivar. "91Y20". PVP 200800109.

PI 652918 PVPO. *Glycine max* (L.) Merr.
Cultivar. "91Y90". PVP 200800110.

PI 652919 PVPO. *Glycine max* (L.) Merr.
Cultivar. "95Y20". PVP 200800111.

PI 652920 PVPO. *Glycine max* (L.) Merr.
Cultivar. "95Y40". PVP 200800112.

PI 652921 PVPO. *Glycine max* (L.) Merr.
Cultivar. "94Y60". PVP 200800113.

PI 652922 PVPO. *Glycine max* (L.) Merr.
Cultivar. "94Y90". PVP 200800114.

The following were developed by WestBred LLC, United States. Received 02/13/2008.

PI 652923 PVPO. *Triticum aestivum* L. **subsp. aestivum**
Cultivar. "SAMSON". PVP 200800074. Pedigree - Express/Knudson.

PI 652924 PVPO. *Triticum aestivum* L. **subsp. aestivum**
Cultivar. Pureline. "BLADE"; CA905-750. PVP 200800075. Pedigree - Knudsen/Alsen. Hard red spring wheat.

The following were developed by Blue Moon Farms, United States; Rutgers, The State University of New Jersey, New Jersey, United States. Received 02/13/2008.

PI 652925 PVPO. *Poa pratensis* L.
Cultivar. "A99-2412". PVP 200800076.

The following were developed by WestBred LLC, United States. Received 02/13/2008.

PI 652926 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "ASPEN"; HV9W96-1383W. PVP 200800077. Pedigree - TX91D6913/B1551W. Hard white winter wheat.

PI 652927 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "WINTERHAWK"; HV9W02-846R. PVP 200800078. Pedigree - 474S10-1/X87807//HBK736-3. Hard red winter wheat.

The following were developed by DLF International Seeds, Inc., United States. Received 02/13/2008.

PI 652928 PVPO. *Festuca rubra* subsp. *commutata* Gaudin
Cultivar. "LACROSSE". PVP 200800080.

The following were developed by NexGen Turf Research, LLC, United States. Received 02/13/2008.

PI 652929 PVPO. *Festuca arundinacea* Schreb.
Cultivar. "ATF1167". PVP 200800081.

The following were developed by Regents of the University of Minnesota, Minnesota, United States. Received 02/13/2008.

PI 652930 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "RB07". PVP 200800115. Pedigree - Norlander/HJ98.

The following were developed by USDA, NRCS, Booneville Plant Materials Center, 6883 South Hwy 23, Booneville, Arkansas 72927, United States. Received 02/08/2008.

PI 652931. *Andropogon gerardii* Vitman
Cultivar. "Hampton Germplasm"; 9056854. Collected 11/1987 in Missouri, United States. Wayne County, Marble Hill (MLRA 116A). Collected from plants growing on a northwest exposure and on a Clarksville soil type with a 7% slope. Hampton germplasm is recommended primarily for livestock, forage production, and wildlife habitat. It is best used as a seasonal hay crop. The abundant, leafy forage is palatable to all classes of livestock. It can be utilized in grazing situations if appropriate grazing management techniques are applied (i.e. rotational grazing) to prevent damage to the plant community and stand population. Hampton germplasm may also be used for many types of conservation plantings, such as plant buffers and vegetative barriers. The extensive root system penetrates deeply which makes it ideal for holding soil particles and the prevention of erosion.

The following were developed by Herbert W. Ohm, Purdue University, Department of Agronomy, 915 West State Street, West Lafayette, Indiana 47907-2054, United States. Received 02/22/2008.

PI 652932. *Avena sativa* L.

Cultivar. Pureline. "EXCEL"; P9741A41-4-6-7; NSGC 18830. Pedigree - Jay/5/IL79-4924/Classic/4/WIX6141-2//INO9201*2/Newdak/3/ ND881374/Jud. Released 2007. Excel was released for its wide adaptation, high grain yield and tolerance to yellow dwarf, caused by the viruses BYDV (PAV) and CYDV (RPV). Excel, tested in Indiana and regional performance nurseries as the line P9741A41-4-6-7 was in performance nurseries at Lafayette, IN four seasons 2004 - 2007, in the Uniform Midseason Oat Performance Nursery 2004, 2005, and in the Uniform Quaker Oat Nursery in 2006. Excel is very high yielding (statistically higher than Jay, Robust and Woodburn in tests at Lafayette, Indiana in 2004 - 2007, statistically higher than Jerry, Ogle and Robust in the regional Uniform Midseason Oat Performance Nursery in 2004 and 2005, and Excel ranked 9 of 36 entries in the Quaker Uniform Oat Nursery in 2006). Excel is moderately early and medium tall, has strong straw, has resistance to crown rust, yellow dwarf and loose smut, and is susceptible to stem rust.

PI 652933. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "INW0731"; P99608C1-1-3-4; NSGC 18831. Pedigree - Sunset/Pioneer2571/3/Clark//Roazon/Caldwell/4/VPML/Moisson//Clark/3/Clark*2/Caldwell/9/Caldwell*2/Pioneers76/8/Beau*2/Potomac//Auburn/Caldwell*2/7/Benhur/Arthur/6/Laporte/Konx*2/5/Hart/Beau/4/Arthur/3/Monon//Funo/Knox/10/Freedom/Fundulea201R. Released 2007. INW0731 was released for its high yield, excellent soft wheat milling and baking qualities, moderate resistance to yellow dwarf, fusarium head blight, leaf rust, powdery mildew, stagonospora nodorum blotch, septoria leaf blotch, Soilborne mosaic virus, and Wheat spindle streak mosaic virus. INW0731 is susceptible to prevalent biotypes of Hessian fly, and prevalent races of stripe rust and stem rust in Indiana. It is adapted to Indiana, especially southern Indiana and adjacent regions, and has survived winters and performed well in northern Indiana, but winters have been mild since 1996.

The following were donated by Richard Ozminkowski, Heinz USA, P.O. Box 57, Stockton, California 95201-3057, United States. Received 09/04/2007.

PI 652934. *Solanum lycopersicum* L.

Cultivar. "Heinz 1706-BG"; Lot# 031873-x/B.

Unknown source. Received 02/15/2008.

PI 652935. *Glycine max* (L.) Merr.

Breeding. Pureline. "BARC-19"; 7 P 116; SY 801001. Pedigree - BARC-19 is an F6 derived line from the cross PA7-1-1 x Spry by selection for tall plant height and lodging resistance at Beltsville, Maryland and State College, Pennsylvania. PA7-1-1 is an F4 derived line from the cross Burlison x PA 4-11g#1. PA 4-11g#1 was developed from the four way cross [(Wilson 6 x Forrest) x (Perry x L76-0253)]. L76-0253 is an F6 segregate of the cross Williams x PI 229358. BARC-19 is being released as a

susceptible check for southern stem canker disease and sudden death syndrome disease because of its clear and intense expression of disease symptoms. BARC-19 is a maturity group VI line with very tall growth and good lodging resistance. Although BARC-19 was bred for forage production, this release is not intended for either grain or forage production. This release is intended to provide an exceptionally useful susceptible check in southern stem canker and sudden death syndrome disease evaluations. BARC-19 is susceptible to races 2, 3, and 14 of soybean cyst nematode and races 1, 2, and 7 of phytophthora. BARC-19 has white flowers and tawny pubescence color. Seeds are white with a dull luster and have black hilum color.

The following were developed by Forrest Smith, Texas A&M University-Kingsville, Caesar Kleberg Wildlife Research Institute, MSC 218, Kingsville, Texas 78363, United States. Received 02/11/2008.

PI 652936. *Digitaria californica* (Benth.) Henrard

Breeding. Population. LaSalle Germplasm Arizona Cottontop; 9093398. Pedigree - Composite release of 12 accessions from the Rio Grande Plains of S. Texas. Accessions selected from evaluation at 4 locations in S. Texas for plant vigor, seed production, forage production, and active seed germination. Each of 12 accessions was increased in isolation so that maximum genetic diversity was preserved in the initial release. Increase of each accession was done from the original field collection. Highly palatable native grass with good forage value. Rapid early germination and low dormancy make this release an excellent choice for quickly establishing native grass cover following disturbances such as mechanical brush control. Generally adapted to areas south of a line drawn from Del Rio to San Antonio, and east of Interstate Hwy. 37. Performs best on loam, clay loam, and sandy loam soils. Planting on very sandy soils is not recommended. Has successfully been established by planting coated and un-coated seed. Un-coated seed cannot be planted with a seed drill unless carriers are used to aid seed flow through drill tubes. Coated seed can easily be planted with a drill. Recommended seeding rate for pure stands is 1/2 lbs. pure live seed/acre. Seed should not be planted deeper than 1/4". Seed germination averages 43-63%, dormancy 9-19%, and pure live seed 40-60%. Uncoated seed has 677,000 seeds/pound; coated seed has 127,000 seeds/pound. Seed most easily harvested with a Flail-Vac, or other brush type harvester. Seed is produced from March-October in most instances in S. Texas. On 30" rowed plantings, harvested 4 times annually, average yearly yield is 50 lbs. pure live seed per acre. Mowing or burning plants when dormant stimulates new growth, prevents lodging, steminess, irregular maturity and loss of plant vigor. Infestations of rice stink bugs (*Oebalus pugnax*) can severely reduce seed yield if not controlled diligently in dry years. Seed easily cleaned by hammer milling, and separation from stems and trash through # 2 or # 3 screens. Cleaning or attempting to clean seed to the bare caryopsis results in a significant loss of seed quality. Plantings using coated seed have shown better stand establishment than plantings with uncoated seed.

The following were developed by Seminis Vegetable Seeds, Inc., Woodland, California, United States. Received 02/20/2008.

PI 652937 PVPO. *Solanum lycopersicum* L.

Cultivar. "PICUS". PVP 200800039.

The following were developed by Florida Agricultural Experiment Station, Florida, United States; Barry Tillman, University of Florida - IFAS, Northern Florida Research, and Education Center, Marianna, Florida 32446-7906, United States. Received 02/19/2008.

PI 652938. *Arachis hypogaea* L.

Cultivar. "FLORIDA-07". PVP 200800069; CV-104; Utility Patent 6121472; Utility Patent 6063984; Utility Patent 5922390. Pedigree - (89xOL14-11-1-1-1-b2-B) X C-99R. Has larger than average runner market-type seeds and pods. Growth habit is prostrate, typical of runner type peanut cultivars. Under irrigation, it matures about 140 d after planting which places it in the category of medium relative maturity. Release was based on its excellent pod yield potential, competitive kernel grade (percentage total sound mature kernels), high oleic fatty acid oil chemistry, and resistance to spotted wilt and white mold.

The following were donated by Texas A&M University, Texas Agricultural Exp. Station, College Station, Texas 77841, United States. Received 1964.

PI 652939. *Crotalaria juncea* L.

NSL 29905; TEXAS 374.

The following were developed by Dave Burrup, USDA-ARS, PO Box 307, Aberdeen, Idaho 83210, United States; Thomas K. Blake, Montana State University, Dept. of Plant Sciences & Plant Pathology, 109 Plant Biosciences Building, Bozeman, Montana 59717, 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; Don Obert, USDA-ARS, 1691 S. 2700 W., Aberdeen, Idaho 83210, United States; M.A. Dillon, Colorado State University, San Luis Valley Research Center, 0249 East Road 9 North, Center, Colorado 81125, United States. Received 02/27/2008.

PI 652940. *Avena sativa* L.

Cultivar. Pureline. "MAVERICK"; 90Ab1322; NSGC 18832. CV-375. Pedigree - 80Ab988/Monida. Released 2007. Maverick is a short-strawed spring oat cultivar suited to irrigated and higher moisture areas in Colorado, Idaho and Montana. It is a white-hulled, high-protein type favored in the equine industry.

PI 652941. *Avena sativa* L.

Cultivar. Pureline. "MONICO"; AbSP9-2; NSGC 18833. CV-376. Pedigree - 83Ab3119/Monida :: 83Ab3119=Cayuse/76Ab6843(Appaloosa/3/Otana//CokerX848-1-1-2/Cayuse). Released 2007. Monico is an early to midseason, relatively tall spring oat with excellent yield potential under both irrigated and dryland conditions in Montana, Idaho, and Colorado.

The following were developed by Daryl T. Bowman, North Carolina State University, Department of Crop Science, Box 8604, Raleigh, North Carolina 27695-8604, United States; 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; D.C. Jones, Cotton Incorporated, 6399 Weston Parkway, Cary, North Carolina 27513, United States; O.A. Gutierrez, USDA-ARS, Crop Science Research Laboratory, Mississippi State, Mississippi 39762, United States; Russell W. Hayes, USDA, ARS, P.O. Box 5367, Mississippi State, Mississippi 39762, United States; C.E. Watson, Mississippi Agriculture and forestry Exp. Station, Mississippi State, Mississippi 39762, United States. Received 02/27/2008.

PI 652942. *Gossypium hirsutum* L.

Breeding. Pureline. RMUP-C5. GP-893. Pedigree - Unique random mated germplasm population of Upland cotton involving 6 cycles of random mating beginning with a diverse 11 parent half diallel. Parents were eleven diverse Upland cotton lines: Acala Ultima, Tamcot Pyramid, Coker 315, Stoneville 825, Fibermax 966, M-240RNR, Paymaster HS 26, Deltapine Acala 90, Suregrow 747, Phytogen PSC 355, Stoneville 474. The parents used in developing the population represent a diverse group of lines from major breeding programs. The bulked pollen method of pollination was used in the development and there were six cycles of random mating with intercrossing of the F₁s considered cycle zero. Selfed seed of C5S1 have been released. Comparisons of correlation coefficients between traits among parents, C0 and C5 cycles of random mating show reshuffling of linkage blocks. Because this germplasm represents random mating among parents from the major seed breeding companies, this population should be of value to breeders across the U.S. Cotton Belt.

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; R.J. Grant, W.H. Miner Agric. Res. Institute, Chazy, New York 12921, United States; Scott Sattler, USDA, ARS, University of Nebraska - Lincoln, Grain, Forage and Bioenergy Research Unit, Lincoln, Nebraska 68583-0739, United States; A.L. Oliver, Oklahoma State University, Dept. of Physics, Stillwater, Oklahoma 74078, United States. Received 03/04/2008.

PI 652943. *Sorghum bicolor* (L.) Moench

Genetic. BN611. GS-140. Pedigree - 00-2051 (a sister line of N598) / 00-2172 (a sister line of Atlas bmr-12). BN611, A/B612, and RN613 have stacked brown midrib genes bmr-6 and bmr-12. Release of these genetic stocks makes stacked brown midrib genes reported to reduce the activity of two enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyl transferase (bmr-12), available in a common forage sorghum, a common grain sorghum seed parent, and a common grain sorghum pollen parent background. The genetic stocks have immediate application for basic research involving lignin synthesis.

PI 652944. *Sorghum bicolor* (L.) Moench

Genetic. AN612. GS-141. Pedigree - A1 N599 / 4*BN612. BN611, A/B612, and RN613 have stacked brown midrib genes bmr-6 and bmr-12. Release of these

genetic stocks makes stacked brown midrib genes reported to reduce the activity of two enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyl transferase (bmr-12), available in a common forage sorghum, a common grain sorghum seed parent, and a common grain sorghum pollen parent background. The genetic stocks have immediate application for basic research involving lignin synthesis.

PI 652945. *Sorghum bicolor* (L.) Moench

Genetic. BN612. GS-142. Pedigree - 00-1754 (a sister-line of N599) / 00-1644 (a sister line of N600). BN611, A/B612, and RN613 have stacked brown midrib genes bmr-6 and bmr-12. Release of these genetic stocks makes stacked brown midrib genes reported to reduce the activity of two enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyl transferase (bmr-12), available in a common forage sorghum, a common grain sorghum seed parent, and a common grain sorghum pollen parent background. The genetic stocks have immediate application for basic research involving lignin synthesis.

PI 652946. *Sorghum bicolor* (L.) Moench

Genetic. RN613. GS-143. Pedigree - 00-1677 (a ms3ms3 sister-line of N609) / 00-2161 (a sister-line of N610). BN611, A/B612, and RN613 have stacked brown midrib genes bmr-6 and bmr-12. Release of these genetic stocks makes stacked brown midrib genes reported to reduce the activity of two enzymes important in lignin synthesis, cinnamyl alcohol dehydrogenase (bmr-6) and O-methyl transferase (bmr-12), available in a common forage sorghum, a common grain sorghum seed parent, and a common grain sorghum pollen parent background. The genetic stocks have immediate application for basic research involving lignin synthesis.

The following were developed by Brian T. Scully, USDA-ARS, Crop Protection and Management Res. Unit, P.O. Box 748, Tifton, Georgia 31793-0748, United States. Received 02/29/2008.

PI 652947. *Zoysia japonica* Steud.

Cultivar. "ULTIMATE"; BA-189. Pedigree - This cultivar originated and was initially selected as a distinct vegetative inclusion in Meyer *Zoysia japonica* (Stued.). Ultimate was first identified and selected as BA-189 in Palm Beach County, Florida. It was an individual plant selected from an array of thirteen accessions chosen to represent the variability of off-types growing in an original planting of Ultimate. The purpose of this breeding program was to identify and develop an alternative to the longstanding standard cultivar Meyer, and to enlarge the diversity of clonally propagated warm season perennial turf cultivars grown in Florida's specialty zoysiagrass market. Ultimate was developed as a regional variety for the subtropical and tropical regions of Florida. It was originally tested as breeding line BA-189, and Plant Patent Application No. 11/174,308 (Jul. 22, 2005) was submitted under said designation. Ultimate was selected for four agronomic and horticultural traits, including: 1) darker leaf color; 2) a more refined leaf structure; 3) a faster rate of crop establishment; and 4) reduced seed head production. Leaf color was determined using the Munsell Color Chart. Ultimate produced a fresh leaf color that was a darker green than the standard Meyer, and ranged from 5GY (4/6 5/6) to 7.5GY (4/6 - 5/6). It also produced leaves that averaged 23% shorter and 22% narrower than the standard variety Meyer. Agronomically, Ultimate produced 57% fewer seed heads on an annual

basis than the standard variety Meyer , and in comparison to Meyer , Ultimate had a shorter peak-duration of seed head production, which was offset by about 60 days from the standard. In southern Florida, Ultimate exhibited a faster rate of crop establishment than Meyer , and typically covered the plots a month earlier than the standard cultivar. In comparison to the standard variety, Ultimate exhibited a higher level of host resistance to the tropical sod webworm (*Herpetogramma phaeopteralis* Guenee) (Lepidoptera:Pyralidae).

PI 652948. *Paspalum vaginatum* Sw.

Cultivar. "ALOHA"; H99-47. Pedigree - Aloha originated at the University of Hawaii s Lalamilo Research Farm in Kamuela on the island of Hawaii. It was identified and initially selected in 1999 as a seedling from the open pollination of naturalized local land races. Aloha was initially coded as breeding line H99-47. The purpose of this breeding program was to identify and develop acceptable alternative turfgrass varieties for Florida and to enlarge the diversity of clonally propagated warm season perennial turf cultivars and species grown for Florida s specialty turfgrass markets. Aloha was developed as a regional variety for the subtropical and tropical regions of Florida. It was originally tested as breeding line H99-47, and Plant Patent Application No. 11/188,229 (Jul.22, 2005) was submitted under Aloha designation. Aloha was selected for three agronomic traits, including: 1) darker leaf color; 2) insect resistance; and 3) a faster rate of crop establishment. Leaf color was determined using the Munsell Color Chart, Aloha produced a fresh leaf color that was a darker green than the standard varieties, and ranged from 5GY (5-4/4) to 7.5GY (5-4/4). In comparison to a set of standard varieties, Aloha exhibited a higher level of host plant resistance to the greenbug aphid (*Schizaphes graminium* Rodani) (Homoptera:Aphidae). On Aloha , this aphid had a slower rate of development to sexual maturity, a shortened life expectancy and lower fecundity. Aloha also induced an antibiosis reaction to the tropical sod webworm (*Herpetogramma phaeopteralis* Guenee) (Lepidoptera:Pyralidae), although this resistance was not statistically superior to the other seashore paspalum turf varieties. Aloha also exhibited a faster rate of crop establishment than the standards, and typically attained 50% plot coverage a month to four months earlier than the standard cultivars.

PI 652949. *Eremochloa ophiuroides* (Munro) Hack.

Cultivar. "HAMMOCK"; BA-417. Pedigree - This variety of centipedegrass (*Eremochloa ophiuroides* (Munro) Hack.) originated and was initially selected in Palm Beach County, Florida, and coded as breeding line number BA-417. It was one of a number of unique and distinctly different vegetative off-types/inclusions growing in a planting of common centipedegrass. The purpose of this breeding program was to enlarge the diversity of clonally propagated warm season perennial turf varieties grown in Florida s specialty turfgrass market and identify a centipedegrass variety that would be acceptable as a regional variety for the subtropical and tropical regions of Florida, where centipedegrass is not typically grown. It was originally tested as breeding line BA-417, and Plant Patent Application No. 12/006,777 (Jan. 15, 2008) was submitted under said designation. Hammock was selected for two agronomic traits, including a more refined leaf structure and quality along with a faster rate of crop establishment. Hammock produced leaves that were significantly shorter and generally narrower than the standard varieties, and received superior summer-turf quality

ratings. It also produced a fresh leaf color that ranged from 2.5GY (5-6/2) to 7.5GY (5-6/4) as determined by comparing vegetative samples to the Munsell Color Chart. In southern Florida, Hammock exhibited a faster rate of crop establishment than the standard varieties, and typically covered the plots a month earlier. This pattern was repeated in northern Florida.

The following were developed by Pioneer Hi-Bred International, Inc., Johnston, Iowa 50131, United States. Received 02/29/2008.

PI 652950 PVPO. *Glycine max* (L.) Merr.
Cultivar. "93Y10". PVP 200800086.

PI 652951 PVPO. *Glycine max* (L.) Merr.
Cultivar. "98Y11". PVP 200800090.

The following were developed by Saka-Ragis Pflanzenzucht GbR, Hanse Seed Corporation, Weston, Florida 33327, United States. Received 02/27/2008.

PI 652952 PVPO. *Solanum tuberosum* L.
Cultivar. "ASTORIA". PVP 200200116.

The following were developed by Frito-Lay North America, Inc., Castle Rock, Colorado 80108, United States. Received 03/05/2008.

PI 652953 PVPO. *Solanum tuberosum* L.
Cultivar. "FL-1930". PVP 200100164.

PI 652954 PVPO. *Solanum tuberosum* L.
Cultivar. "FL-1909". PVP 200200125.

PI 652955 PVPO. *Solanum tuberosum* L.
Cultivar. "FL 1922". PVP 200200126.

PI 652956 PVPO. *Solanum tuberosum* L.
Cultivar. "FL 2006". PVP 200200127.

PI 652957 PVPO. *Solanum tuberosum* L.
Cultivar. "FL 2049". PVP 200500204.

The following were donated by Nourse Farms, Inc., 41 River Road, South Deerfield, Massachusetts 01373, United States. Received 03/06/2006.

PI 652958. *Rubus idaeus* L.
Cultivar. CRUB 2328.

The following were developed by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Harvey K. Hall, Shekinah Berries Ltd, 1 Clay Street, 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 12/12/2006.

PI 652959. Rubus hybrid

Cultivar. NZ 9337-1; CRUB 2343.

PI 652960. Rubus hybrid

Cultivar. NZ 9351-4; CRUB 2344.

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 12/12/2006.

PI 652961. Rubus hybrid

Cultivar. ORUS 1107R-4; CRUB 2346.

The following were developed by Francis J. Lawrence, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, 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 12/12/2006.

PI 652962. Rubus hybrid

Cultivar. ORUS 1142-1; CRUB 2347.

The following were developed by Jim Fruth, 6/10 Acre Company, 4002 Davis Street, Pequot Lakes, Minnesota 56472, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 12/12/2006.

PI 652963. Rubus hybrid

Cultivar. "Pequot"; CRUB 2348.

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 12/12/2006.

PI 652964. Rubus hybrid

Cultivar. ORUS 1395-2; CRUB 2349.

PI 652965. Rubus hybrid

Cultivar. ORUS 1397-5; CRUB 2350.

PI 652966. Rubus hybrid

Cultivar. ORUS 1924-1; CRUB 2351.

PI 652967. Rubus hybrid

Cultivar. ORUS 2376-1; CRUB 2352.

PI 652968. Rubus hybrid

Cultivar. ORUS 2434-1; CRUB 2353.

Unknown source. Received 05/29/2007.

PI 652969. *Rubus* sp.
Cultivar. CRUB 2356.

Unknown source. Received 06/11/2007.

PI 652970. *Rubus trivialis* Michx.
Wild. HDF-2007-005; *R. trivialis* red form; CRUB 2358. Collected
06/01/2007 in North Carolina, United States.

Unknown source. Received 06/11/2007.

PI 652971. *Rubus occidentalis* L.
Wild. HDF-2007-017; *R. occidentalis* Glassy Mountain 1; CRUB 2362.
Collected 06/03/2007 in South Carolina, United States.

Unknown source. Received 06/11/2007.

PI 652972. *Rubus flagellaris* Willd.
Wild. HDF-2007-018; *R. trivialis* HD-2007-018; CRUB 2363. Collected
06/03/2007 in South Carolina, United States.

Unknown source. Received 06/11/2007.

PI 652973. *Rubus occidentalis* L.
Wild. HDF-2007-019; *R. occidentalis* Glassy Mountain 2; CRUB 2364.
Collected 06/03/2007 in South Carolina, United States.

Unknown source. Received 06/11/2007.

PI 652974. *Rubus occidentalis* L.
Wild. HDF-2007-029; *R. occidentalis* HDF-2007-029; CRUB 2366. Collected
06/04/2007 in South Carolina, United States.

Unknown source. Received 06/11/2007.

PI 652975. *Rubus occidentalis* L.
Wild. HDF-2007-031; *R. occidentalis* HDF-2007-031; CRUB 2368. Collected
06/05/2007 in Georgia, United States.

Unknown source. Received 06/11/2007.

PI 652976. *Rubus occidentalis* L.
Wild. HDF-2007-034; *R. occidentalis* HDF-2007-034; CRUB 2370. Collected
06/05/2007 in Georgia, United States.

Unknown source. Received 06/11/2007.

PI 652977. *Rubus occidentalis* L.

Wild. HDF-2007-036; *R. occidentalis* HDF-2007-036; CRUB 2372. Collected 06/05/2007 in Georgia, United States.

Unknown source. Received 06/11/2007.

PI 652978. *Rubus occidentalis* L.

Wild. HDF-2007-039; *R. occidentalis* HDF-2007-039; CRUB 2373. Collected 06/05/2007 in Georgia, United States.

Unknown source. Received 06/11/2007.

PI 652979. *Rubus allegheniensis* Porter

Wild. HDF-2007-040; *R. allegheniensis* HD-2007-040; CRUB 2374. Collected 06/05/2007 in Georgia, United States.

Unknown source. Received 06/11/2007.

PI 652980. *Rubus hispidus* L.

Wild. HDF-2007-045; *R. hispidus* HD-2007-045; CRUB 2375. Collected 06/05/2007 in Georgia, United States.

Unknown source. Received 06/11/2007.

PI 652981. *Rubus occidentalis* L.

Wild. HDF-2007-050; *R. occidentalis* HDF-2007-050; CRUB 2376. Collected 06/06/2007 in Georgia, United States.

Unknown source. Received 06/11/2007.

PI 652982. *Rubus occidentalis* L.

Wild. HDF-2007-061; *R. occidentalis* HDF-2007-061; CRUB 2378. Collected 06/08/2007 in Alabama, United States.

Unknown source. Received 06/11/2007.

PI 652983. *Rubus occidentalis* L.

Wild. HDF-2007-066; *R. occidentalis* Mentone late HDF-066; CRUB 2380. Collected 06/08/2007 in Alabama, United States.

Unknown source. Received 07/15/2007.

PI 652984. *Rubus occidentalis* L.

Wild. HDF-2007-076; *R. occidentalis* HDF-2007-076; CRUB 2386. Collected 07/08/2007 in Kansas, United States.

Unknown source. Received 07/15/2007.

PI 652985. *Rubus occidentalis* L.

Wild. HDF-2007-084; R. *occidentalis* HDF-2007-084; CRUB 2391. Collected 07/08/2007 in Kansas, United States.

Unknown source. Received 07/15/2007.

PI 652986. *Rubus occidentalis* L.

Wild. HDF-2007-087; R. *occidentalis* HDF-2007-087; CRUB 2393. Collected 07/09/2007 in Nebraska, United States.

Unknown source. Received 07/15/2007.

PI 652987. *Rubus idaeus* L.

Wild. HDF-2007-101; R. *idaeus* HDF-2007-101; CRUB 2401. Collected 07/10/2007 in Nebraska, United States.

Unknown source. Received 07/15/2007.

PI 652988. *Rubus occidentalis* L.

Wild. HDF-2007-107; R. *occidentalis* HDF-2007-107; CRUB 2404. Collected 07/11/2007 in South Dakota, United States.

Unknown source. Received 07/15/2007.

PI 652989. *Rubus idaeus* L.

Wild. HDF-2007-112; R. *idaeus* HDF-2007-112; CRUB 2408. Collected 07/12/2007 in South Dakota, United States.

Unknown source. Received 07/15/2007.

PI 652990. *Rubus occidentalis* L.

Wild. HDF-2007-116; R. *occidentalis* HDF-2007-116; CRUB 2411. Collected 07/12/2007 in South Dakota, United States.

Unknown source. Received 10/25/2007.

PI 652991. *Rubus hispidus* L.

Wild. H-PA-2007-02; CRUB 2502; R. *hispidus* H-PA-2007-02. Collected 10/23/2007 in Pennsylvania, United States.

The following were collected by Thomas A. Lumpkin, Washington State University, Department of Crop and Soil Science, 261 Johnson Hall, Pullman, Washington 99164-6420, United States. Received 08/05/1992.

PI 652992. *Ribes sachalinense* (F. Schmidt) Nakai

Wild. 11; ribes = smorodina; CRIB 883. Collected 07/31/1992 in Russian Federation. Latitude 47° 3' N. Longitude 142° 45' E. Elevation

150 m. Dense forest canopy, base of hills near stream. Pedigree - collected from the wild in Russia.

The following were developed by Pal Tamas, Box 127, Tollarp, Kristianstad S-290 10, Sweden. Donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 07/15/1993.

PI 652993. *Ribes nigrum* L.

Cultivar. "Titania"; Q 26761; CRIB 922. PP11,439. Pedigree - Altajskaja Desertnaja x (Consort x Kajaanin Musta). Cropping season: midseason, beginning - mid July Plant: very strong growth, regular pruning of 4-5 year old shoots is necessary; high self fertility. Fruit: very large berries on medium long trusses, uniform ripening, keeps well on gh acidity, low flavor, resistant to 'run-off' Yield: very high Pests and diseases: resistant to American gooseberry mildew and to white pine blister rust. susceptible to aphids and red spider mite. Value: for commercial prtrial purposes due to its high yields and good processing quality and home gardens due to its disease resistance. G. Spiegler, 1995 Re-introduced 01/92 as Q 28852.

The following were developed by Botanical Garden, University of British Columbia, 6501 North West Marine Drive, Vancouver, British Columbia V6T 1W5, Canada. Donated by Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 09/17/1993.

PI 652994. *Ribes sanguineum* Pursh

Cultivated. CRIB 938; White Icicle. Canadian Plant Breeders Righte. Pedigree - selection of *R. sanguineum* from Victoria, B.C., Canada. Deciduous shrub growing to 3 m tall and 2 m wide. Drooping pure white racemes of flowers appear in early spring just as the new leaves are emerging. This cultivar flowers about two weeks earlier than most red forms. Lobed pale green leaves are attractive all summer and emit a spicy fragrance when touched. Excellent as a specimen shrum in the home garden for mass planting along highways, in parks and city landscapes. Particularly effective when mixed with red-flowering fable pest or disease problems observed in garden setting although subject to aphids in nursery greenhouse. Hardy to USDA Zone 6, Canadian Zone 6b-7a. Propagation by softwood or semi-hardwood nodal cuttings approximately 10 cm in length. Rooting hormone of 0.3 to 0.5% IBA in talc. Roots in 4 to 6 weeks under mist. Avoid rooting as semi-hardwood after late summer because successful overwintering may be a problem. Can be rooted as 15 cm dormant leafless hardwood cuttings in late fall-early winter. Apply 0.8 % IBA to base of cuttings. Suitable for direct sticking. UBC, germplasm release notice, 1985.

The following were developed by I. Hricovsky; Jozef Cvopa, Research Inst. of Fruit and Decorative Trees, Cervenej armady 53, Bojnice, Slovakia. Donated by Alexander Illitch Eppler, 3828 SW Orchard Street, Seattle, Washington 98126, United States. Received 03/08/1994.

PI 652995. *Ribes nigrum* L.

Clone. CRIB 949. Pedigree - Booskoopska cierna x Silvergieter Zwarte. A large-fruited, pest and disease resistant blackcurrant. Fruit: large, produced on long strings, mid-season ripening, high quality. Plant: moderate yield, erect and well shaped. Daubeney, 1996.

PI 652996. *Ribes nigrum* L.

Clone. CRIB 950. Pedigree - Skivergieters Zwarte x Holandska cierna. A disease and pest resistant blackcurrant adapted to machine harvesting. Fruit: uniform, good flavor, produced on relatively short strings, early ripening, easy to harvest. Plant: moderate yield, vigorous, good shape Daubeney.

The following were developed by Rex M. Brennan, Scottish Crop Research Inst., Mylnefield, Genome Dynamics Programme, Dundee, Scotland DD2 5DA, United Kingdom. Donated by E.F. Mashburn, The International Ribes Association, 707 Front Street, Northumberland, Pennsylvania 17857, United States. Received 11/22/1996.

PI 652997. *Ribes nigrum* L.

Cultivar. CRIB 1129. Pedigree - Ben Sarek x Ben Lomond.

The following were donated by Steven A. McKay, Cornell Univ.-Coop. Ext., Columbia County, 479 Rt. 66, Hudson, New York 12534, United States. Received 01/11/1998.

PI 652998. *Ribes uva-crispa* L.

Cultivar. "Welcome"; CRIB 1150. Pedigree - Open pollinated seedling selection of cv Poorman.

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 652999. *Ribes nigrum* L.

Cultivar. "Stella I"; CRIB 1171; Q 27933. Developed in Sweden. Pedigree - wild *R. nigrum* (Erkiheikki-type) x Boskoop Giant.

PI 653000. *Ribes x nidigrolaria* Rud. Bauer & A. Bauer

Cultivar. "Jostaki"; "Jogranda"; Q 28403; CRIB 1182. Developed in Germany. Pedigree - F3 OP Schwarze Traube (*Ribes nigrum*) x *Ribes divaricatum*.

The following were donated by John Carter, University of Minnesota, Department of Horticultural Sciences, 305 Alderman Hall, St. Paul, Minnesota 55108, United States. Received 06/11/1999.

PI 653001. *Ribes rubrum* L.

Cultivar. CRIB 1185. Developed in Norway. Pedigree - *R. petraeum* x *R. rubrum* (direction of cross unknown).

The following were donated by USDA, ARS, Fruit Laboratory, Plant Germplasm Quarantine Office, Beltsville, Maryland 20705-2350, United States. Received 12/10/1999.

PI 653002. Ribes nigrum L.

Cultivar. "Brodtorp 1/9"; CRIB 1198; Q 25904. Pedigree - selection of *R. nigrum* from Finland.

The following were collected by Dan Hinkley, Heronswood Nursery, 7530 288th NE, Kingston, Washington 98346, United States. Received 04/27/2000.

PI 653003. Ribes sp.

Wild. CRIB 1225. Collected 1996 in Sichuan, China. Pedigree - collected in the wild from China.

The following were donated by Paul Zambino, USDA Forest Service, Rocky Mountain Research Station, 1221 S. Main Street, Moscow, Idaho 83843, United States. Received 01/25/2002.

PI 653004. Ribes nigrum L.

Cultivar. CRIB 1264. Pedigree - black currant selected in Wisconsin. Information on the 'Heimberger clones' of *Ribes nigrum*, which are still used in the screening programs and research in Minnesota and Wisconsin. Unfortunately, the individual clones that make up the mixture are no longer kept separate, so cuttings may represent one or more of those originals. And the parentage is completely unknown. (Heimburger Clones 1972. Relative blister rust resistance of native and introduced white pines in eastern North America. Biology of Rust Resistance in Forest Trees: Proceedings of a NATO-IUFRO Advanced Study Institute August 17-24, 1969. USDA Forest Service Miscellaneous Publication No. 1221. 1969 Aug 17-1969 Aug 24; University of Idaho, Moscow, Idaho. Washington, D.C.: U.S. Government Printing Office, 1972: 257-69. '...The currants are often infected so heavily by the rust that many leaves drop off during the hot weather of July-August and very few are available at the time of inoculation in September-October. This was remedied about 15 years ago by raising a few thousand seedlings of commercial varieties from berries bought on the market and by selection among these for rust susceptibility and good leaf retention during the summer drought period. About a dozen selected seedlings are being propagated by cuttings as a clone mixture...').

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 Whittmore, U.S. National Arboretum, USDA, ARS, 3501 New York Avenue, NE, Washington, District of Columbia 20002-1958, United States; Ashot A. Charchoghlian, 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 653005. *Ribes uva-crispa* L.

Wild. CRIB 1275. Collected 09/06/2002 in Armenia. Latitude 40° 36' 46" N. Longitude 44° 33' 17" E. Elevation 1987 m. North of Sevan Pass in Tavush Marz provinces. Pedigree - Collected from the wild in Armenia.

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 653006. *Ribes horridum* Rupr.

Wild. R. horridum J59; HD-2004-59; CRIB 1404. 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 provincial route 39. On southwest edge of tunnel growing up 80 degree slope. Associated species: under *Alnus*, *Betula* lycopodium, big leaf. 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 Research 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 09/12/2005.

PI 653007. *Ribes thacherianum* (Jeps.) Munz

Wild. CRIB 1422. Collected in California, United States. Latitude 33° 59' 25" N. Longitude 119° 52' 18" W. Elevation 150 m. Santa Rosa and Santa Cruz Islands. Pedigree - Cultivated from the wild in California. This is an upright shrub growing 4 plus feet tall, and spreading 5 to 6 feet. It is a prickly plant with lots of spines, especially on the young stems. Small pink flowers are borne in the spring. Grow in a sunny or semi-shaded location. The plant may be pruned to shape. Although drought tolerant once established, the plant does best with summer water. -- Information Sheet from UCSC Arboretum dated 5/1992. Shrub less than 3 m. Stem: nodal spines 0-3; internodes hairy, bristly. Lvs cm, shallowly lobed, toothed, upper surface subglabrous, lower surface hairy. Inflorescence: 1-2 flowered; pedicels softly white-hairy. Flower: hypanthium 4-5 mm, longer than wide; sepals spreading, 9-10 mm, pinkish; petals 6 mm, white, margins curl inward; anthers exerted from petals, tips with a short, sharp, flexible point; styles exceeding anthers. Fruit: 7-10 mm, purple; bristles dense, hairs soft. Ecology: Ravines. Elevation: less than 300 m. Bioregional distribution: North Channel Islands (Santa Cruz Island.) Horticultural information: In cultivation. --Jepson Flora Project, Jepson Manual 1993.

The following were donated by Forest Farm Nursery, 990 Tetherow Road, Williams, Oregon 97544-9599, United States. Received 12/15/2005.

PI 653008. *Ribes sanguineum* Pursh

Cultivar. CRIB 1424. Shrub, about 2 meters, with scarlet flowers. Hardiness -20 to -10 F. -- Forest Farm Catalog, 2005.

The following were donated by Nourse Farms, Inc., 41 River Road, South Deerfield, Massachusetts 01373, United States; Nourse Farms, Inc., 41 River Road, South Deerfield, Massachusetts 01373, United States. Received 03/06/2006.

PI 653009. *Ribes uva-crispa* L.

Cultivar. CRIB 1435.

The following were donated by Raintree Nursery, 391 Butts Road, Merton, Washington 98356, United States. Received 02/08/2007.

PI 653010. *Ribes nigrum* L.

Cultivar. "Hill's Kiev"; CRIB 1448.

Unknown source. Received 05/21/2007.

PI 653011. *Ribes amarum* McClatchie

Wild. R. aureum no.3; CRIB 1449. Collected 05/19/2007 in California, United States. Latitude 34° 30' 10" N. Longitude 120° 13' 11" W. Elevation 177 m. Gaviota State Park, Santa Barbara County, Santa Ynez Mountains at junction of Gaviota Peak Trail and Las Cruces Hot Springs Trail. Growing with *Rubus leucodermis*, *Quercus dumosa*, *Brickelia* and *Toyon*; in Sycamore woodland along Hot Springs Creek.

Unknown source. Received 05/21/2007.

PI 653012. *Ribes aureum* var. *gracillimum* (Coville & Britton) A. E. Murray

Wild. CRIB 1450; R. aureum var. *gracillimum* 92-071-4. Collected in California, United States. Latitude 34° 11' 40" N. Longitude 118° 12' 38" W. Elevation 0 m. Los Angeles County, San Rafael Hills, La Canada-Flintridge, Padre's Trail.

Unknown source. Received 05/21/2007.

PI 653013. *Ribes malvaceum* Sm.

Wild. R. malvaceum no.2; CRIB 1451. Collected 05/19/2007 in California, United States. Latitude 34° 30' 6" N. Longitude 120° 11' 55" W. Elevation 736 m. Santa Ynez Mountains, Los Padres National Forest, Santa Barbara County. Steep dry slope, growing with *Rhamnus californica*, *Bromus*, *Brickelia*.

Unknown source. Received 05/21/2007.

PI 653014. *Ribes malvaceum* Sm.

Wild. Dancing Tassels; CRIB 1452; *R. malvaceum* 96-360-3. Collected 04/07/1990 in California, United States. Latitude 32° 51' 33" N. Longitude 118° 27' 23" W. Elevation 0 m. Los Angeles County, San Clemente Island, near top of side canyon of Bryce Canyon.

Unknown source. Received 05/21/2007.

PI 653015. *Ribes malvaceum* Sm.

Wild. Rinconada Rose; CRIB 1453; *R. malvaceum* 05-204-1. Collected in California, United States. Latitude 35° 16' 42" N. Longitude 120° 28' 36" W. Elevation 0 m. San Luis Obispo County, vicinity of Rinconada Mine, Santa Lucia Range east of Santa Margarita Lake. Hilly chaparral country; sunny, dry slope.

Unknown source. Received 05/21/2007.

PI 653016. *Ribes malvaceum* var. *viridifolium* Abrams

Wild. Ortega Beauty; CRIB 1454; *R. malvaceum* var. *viridifolium* 99-007-8. Collected in California, United States. Latitude 33° 39' 7" N. Longitude 117° 24' 43" W. Elevation 0 m. Orange County, Highway 74, near summit of Ortega Highway.

Unknown source. Received 05/21/2007.

PI 653017. *Ribes menziesii* Pursh

Wild. CRIB 1455; *R. menziesii* 00-173-2. Collected 10/13/2000 in California, United States. Latitude 35° 14' 52" N. Longitude 120° 51' 52" W. Elevation 0 m. San Luis Obispo County, Montana de Oro State Park, Coon Creek Trail. Scattered along shaded trail above riparian zone. Growing with *Cornus sericea*, *Rhamnus californica*, *Garrya elliptica* and *Toxicodendron diversilobum*.

Unknown source. Received 05/21/2007.

PI 653018. *Ribes sanguineum* var. *glutinosum* (Benth.) Loudon

Uncertain. "Mesa Rose"; CRIB 1456; *R. sanguineum* var. *glutinosum* 98-215-5. Developed in United States.

Unknown source. Received 05/21/2007.

PI 653019. *Ribes sanguineum* var. *glutinosum* (Benth.) Loudon

Uncertain. Tranquillon Ridge; CRIB 1457; *R. sanguineum* var. *glutinosum* 02-263-2. Collected in California, United States. Latitude 34° 35' 15" N. Longitude 120° 35' 7" W. Elevation 415 m. Tranquillon Ridge, southwest of Lompoc, Santa Barbara county. Found growing in the wild under canopy of Bishop Pines.

Unknown source. Received 05/21/2007.

PI 653020. *Ribes speciosum* Pursh

Uncertain. *R. speciosum* no.1; CRIB 1458. Collected 05/18/2007 in California, United States. Latitude 34° 31' 5" N. Longitude 119° 47' 36" W. Elevation 900 m. Santa Ynez Mountains, Los Padres National Forest, Santa Barbara County, along Knapp's Castle Trail. Growing with *Artemisia californica*, *Quercus dumosa*, *Toyon*, *Climatus* and *Eriopholium confertifolia*.

Unknown source. Received 05/21/2007.

PI 653021. *Ribes speciosum* Pursh

Wild. CRIB 1459; *R. speciosum* 04-028-3.

Unknown source. Received 05/21/2007.

PI 653022. *Ribes viburnifolium* A. Gray

Wild. CRIB 1460; *R. viburnifolium* 96-023-2. Collected 03/01/1996 in Baja Norte, Mexico. Latitude 31° 48' 12" N. Longitude 116° 47' 22" W. Elevation 30 m. Todos Santos Island (south) west of Ensenada. Volcanic rock outcrop; with *Rhus integrifolia*, *Coreposia maritima* and *Leymus condensatus*.

Unknown source. Received 05/21/2007.

PI 653023. *Ribes viburnifolium* A. Gray

Wild. Spooner's Mesa; CRIB 1461; *R. viburnifolium* 01-047-2. Collected 04/04/1996 in California, United States. Latitude 32° 32' 19" N. Longitude 117° 5' 57" W. Elevation 0 m. Spooner's Mesa, San Diego county, Coastal Plain region. Steep N slope 70 degrees. Rocky river wash sandy soil. Partial shade. Ocean breeze keeps air moist but soil dry. Growing with: *Rhus*, *Aremisia*, *Dudleya*, *Eriogonum*, *Mirabilis*, *Isomeris* and *Heteromeles*.

The following were donated by Swedish University of Agricultural Science, Department of Horticultural Plant Breeding, Fjlskestadsv 123-1, Kristianstad, Kristianstad S 291 94, Sweden. Received 04/04/1986.

PI 653024. *Ribes nigrum* L.

Cultivar. "RI-74020-9"; Q 26060. Pedigree - selection of *R. nigrum* from Sweden.

The following were developed by Rudolf Bauer. Donated by Haberli, Obst- und Beerenzentrum, AG Schweiz, Neukirch-Egnach, Switzerland. Received 03/29/1991.

PI 653025. *Ribes x nidigrolaria* Rud. Bauer & A. Bauer

Cultivar. "JUSTINE"; BE 3360; Q 28401. Pedigree - F2 open pollinated selection of an amphidiploid *R. nig.* 'Silvergieters Schwarze' x *R. gross.* 'Grune Hansa'. A vigorous, disease-resistant thornless hybrid of black currant x gooseberry. Origin in Germany by Rudolf Bauer. German Plant Breeder Rights. Cross made in 1959, selected in 1970s, introduced

in Europe in 1985. F2 open-pollinated selection of an amphidiploid F1 hybrid (R. nigrum L. 'Silvergieters Swarze' x R. grossularia 'Gruen Hansa'). Fruit: large to medium size berries, one to three per truss, uneven ripening, very good flavor, keeps well on the bush, slow picking rate by hand. Plant: very strong growth, spreading bushes, midseason, yield high, resistant to Powdery Mildew, white pine blister rust, leaf spot, and gall mite. Valuable for home gardens because of resistance and suitability for jams, jellies, and pies.

The following were donated by Paul Otten, North Star Gardens, 19060 Manning Trail North, Marine On St. Croix, Minnesota 55047-9723, United States; Haberli, Obst- und Beerenzentrum, AG Schweiz, Neukirch-Egnach, Switzerland. Received 04/04/1991.

PI 653026. Ribes nigrum L.

Cultivar. "OMETA"; BE 3360; Q 28404. Collected in Switzerland. Pedigree - Vestra (Baldwin selfed) x open pollinated. Matures mid-early, fruit black, resistant to powdery mildew.

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 05/07/1993.

PI 653027. Ribes nigrum L.

Cultivar. "DIKOVINKA"; 7; BE-4696; Q 30858. Pedigree - Zoya x Pushistaya

The following were donated by Stanislaw Pluta, Res. Institutue of Pomology & Floriculture, ul. Pomologiczna 18, Fruit Plant Breeding, Skierniewice, Skierniewice 96-100, Poland. Received 11/08/1995.

PI 653028. Ribes nigrum L.

Q 35881; 26 C 18. Pedigree - selection of R. nigrum from Poland.

PI 653029. Ribes nigrum L.

"Bialoruskaja Pozdnaja"; "Belaruskaya Pozdnaya [Late]"; Late White Russian; White Russian Late; Q 35883. Developed in Russian Federation. Pedigree - Baldwin x R. nigrum var. sibericum.

PI 653030. Ribes nigrum L.

"Bova"; Q 35886.

PI 653031. Ribes nigrum L.

"Czornyj Zemczug"; "Cherny Zhemchug"; Q 35890. Developed in Russian Federation. Pedigree - Minaj Shmyriov x Brodtorp. Bred by T. S. Zvjagina in the late 1980s.

PI 653032. Ribes nigrum L.

"Dlinnomistnaja"; "Dlinnokistnaya"; Q 35891. Pedigree - Primorsky Champion x Boskoop Giant. There are two cultivars with this same name in Russia. The cultivar that is resistant to mildew is from Michurinsk Another one is susceptible.

- PI 653033. *Ribes nigrum* L.**
 "Docz Altaja"; "Doch Altaja (Daughter of Altai)"; Q 35892. Developed in Russian Federation. Pedigree - Goliath x form 4 R. n. sibericum. Bred by M. Lisavenko in Altai in 1950s.
- PI 653034. *Ribes nigrum* L.**
 "Imandra"; Q 25975; Q 35895. Pedigree - Primorsky Champion x Pecherskaya.
- PI 653035. *Ribes nigrum* L.**
 "Lentaj"; "Lentai"; Q 35896. Pedigree - Brodtorp x Minai Smyrev.
- PI 653036. *Ribes nigrum* L.**
 "Lepaan Musta"; Q 35897. Pedigree - Selection of dark gooseberry from Lepa, Finland.
- PI 653037. *Ribes nigrum* L.**
 "Paris de Respubzica"; Q 35898. Pedigree - selection of European black currant.
- PI 653038. *Ribes nigrum* L.**
 "Sjuta Kijeuskaja"; Q 35901. Pedigree - (Snostb x Zoya) x Minaj Shmyrev.

The following were donated by J.D. Atkins, Wellcourt Farm, Fleets Lane, Tyler Hill, Kent, England, United Kingdom. Received 02/23/1996.

- PI 653039. *Ribes uva-crispa* L.**
 "PAX"; Q 36017. Pedigree - Industry x derivative of Captivator and Lancaster Lad. Fruit: Large, well-shaped, slightly bristly, dark red when fully ripe, moderate dessert flavor, adapted to fresh market and pick-your-own, season similar to Careless, processing quality similar in flavor and texture to Careless Plant good. Yield, very vigorous and spreading habit, virtually spineless. Resistant to powdery mildew, moderately resistant to leaf spot, shows symptoms of gooseberry veinbanding virus. List 38 Register of New Fruit and Nut Cultivars HortScience 32(5): 790.

The following were donated by Res. Institute of Pomology & Floriculture, Pomologiczna 18, Skierniewice, Skierniewice 96-100, Poland; Jan Mills, Northwoods Wholesale Nursery, 28696 S. Cramer Road, Molalla, Oregon 97038, United States. Received 10/03/1996.

- PI 653040. *Ribes uva-crispa* L.**
 Cultivar. "KARPATY"; 9/18 KARPATY; Q 36524. Collected in Poland. Pedigree - Selection of goosberry from Poland.
- PI 653041. *Ribes uva-crispa* L.**
 Cultivar. "NIESLUWOWSKI"; 9/20 NIESLUWOWSKI; NIEWSLUWOWSKI; Q 36526.
- PI 653042. *Ribes uva-crispa* L.**
 Cultivar. SIEWKA K1; Q 36529.

The following were donated by E.C. Meulblok, E.C. Meulblok Boomkwekerijen MTS, Lange Weegje 2A, Netherlands. Received 06/02/1997.

PI 653043. Ribes rubrum L.

"ROODNEUS"; Q 37040. Dutch Plant Breeders Rights. Pedigree - Jonkheer van Tets x Ribes multiflorum. Fruit: large, uniform size; firm, glossy dark red; sour flavor but sweeter after being left on bush; easy to harvest; relatively resistant to rain damage; long shelf life; late flowering and ripening; adapted to late harvest under protection. Plant: high to very high yield; vigorous and spreading with horizontally growing fruit laterals. Low susceptibility to fall foliar diseases.

The following were donated by Marc Geens, Kruisbessen 'Proef'tuin, Bauwerwaan 62, Zomergem, Belgium. Received 02/16/1999.

PI 653044. Ribes uva-crispa L.

Cultivar. "Rolanda"; Q 39674.

PI 653045. Ribes uva-crispa L.

Cultivar. "CSFR-V"; Q 39675.

PI 653046. Ribes uva-crispa L.

Cultivar. "Mucurines"; Q 39676.

PI 653047. Ribes uva-crispa L.

Cultivar. "Reflamba"; Q 39677.

PI 653048. Ribes uva-crispa L.

Cultivar. "Reverta"; Q 39678.

PI 653049. Ribes uva-crispa L.

Cultivar. "Rokula"; Q 39679.

The following were donated by Toivo Univer, Polli, Karksi-Nuia, Vilyandimaa, Estonia. Received 02/23/2000.

PI 653050. Ribes sp.

Cultivar. "Jaanike"; Q 42584.

The following were donated by Jim Gilbert, Northwoods Wholesale Nursery, 28696 S. Cramer Road, Molalla, Oregon 97038, United States. Received 05/09/2000.

PI 653051. Ribes nigrum L.

Cultivar. "Bagira"; Q 42621. Pedigree - Minaj Smyrev x Brodtorp.

PI 653052. Ribes nigrum L.

Cultivar. "Beroza"; Q 42624.

PI 653053. Ribes nigrum L.

Cultivar. "Chernii Kentaber"; Q 42626.

PI 653054. Ribes nigrum L.

Cultivar. "Gibridnaya Ot Rodnoi"; Q 42627.

PI 653055. Ribes nigrum L.
Cultivar. "Perun"; Q 42629.

PI 653056. Ribes nigrum L.
Cultivar. "Vistovochnaya Krasnoyarsk"; Q 42634.

The following were donated by Yves Lespinasse, Institut National de la Recherche Agronomique, Domaine de Bois l'Abbe, B.P. 57, Beaucouze Cedex, France. Received 03/05/2003.

PI 653057. Ribes nigrum L.
"Bija"; N 231; Q 43960.

PI 653058. Ribes nigrum L.
"Burga"; N 185; Q 43961.

PI 653059. Ribes nigrum L.
"Coulter mains"; N 122; Q 43962.

PI 653060. Ribes nigrum L.
"Delindmoi"; N 192; Q 43963.

PI 653061. Ribes nigrum L.
"Fertodi 1"; N 229; Q 43964.

PI 653062. Ribes nigrum L.
"Mitchurin"; N 127; Q 43965.

PI 653063. Ribes nigrum L.
"Nachovka"; N 167; Q 43966.

The following were donated by Rosario Provvidenti, Cornell University, New York State Agricultural Experiment Station, Department of Plant Pathology, Geneva, New York 14456-0462, United States. Received 01/12/2001.

PI 653064. Cucurbita moschata Duchesne
Cultivar. "Nigerian Local"; Grif 14858.

Unknown source. Received 02/15/1990.

PI 653065. Momordica balsamina L.
2187; Grif 5496. Collected in Nepal.

The following were donated by International Rice Research Institute, P.O. Box 3127, Makati Central Post Office, Makati City, Luzon 1271, Philippines; Anna Myers McClung, USDA, ARS, Rice Research Unit, 1509 Aggie Drive, Beaumont, Texas 77713, United States. Received 03/12/2008.

PI 653066. Oryza sativa L.
Cultivated. IRRI-IRGC 12331; ARC 7229; NSGC 18834. Collected 1969 in India.

- PI 653067. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 53637; Basmati 217; NSGC 18835. Collected in India.
- PI 653068. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 38994; Bico Branco; NSGC 18836. Collected in Brazil.
- PI 653069. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 45195; BJ 1; NSGC 18837. Collected in India.
- PI 653070. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 40275; Black Gora; NSGC 18838.
- PI 653071. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 30238; Champa Tong 54; NSGC 18839. Collected in Thailand.
- PI 653072. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 56036; Chau; NSGC 18840. Collected in Vietnam.
- PI 653073. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 17052; Chuan 4; NSGC 18841. Collected in Taiwan.
- PI 653074. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 5855; DA 5; NSGC 18842. Collected in Bangladesh.
- PI 653075. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 23710; Dam; NSGC 18843. Collected in Thailand.
- PI 653076. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 32561; Dular; NSGC 18844. Collected in India.

The following were donated by Anna Myers McClung, USDA, ARS, Rice Research Unit, 1509 Aggie Drive, Beaumont, Texas 77713, United States; CIRAD, Paris, France. Received 03/12/2008.

- PI 653077. *Oryza sativa* L.**
Cultivar. "IRAT 177"; GID 58752; NSGC 18845. Developed in Cote D'Ivoire. Pedigree - selection from IRAT 79.

The following were donated by International Rice Research Institute, P.O. Box 3127, Makati Central Post Office, Makati City, Luzon 1271, Philippines; Anna Myers McClung, USDA, ARS, Rice Research Unit, 1509 Aggie Drive, Beaumont, Texas 77713, United States. Received 03/12/2008.

- PI 653078. *Oryza sativa* L.**
Cultivar. "IRGA 409"; IRRI-IRGC 77483; NSGC 18846. Developed in Brazil. Pedigree - IRGA 244/BR IRGA 412.
- PI 653079. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 17757; Jambu; NSGC 18847. Collected in Indonesia.
- PI 653080. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 27716; Kaw Luyoeng; NSGC 18848. Collected in Thailand.

- PI 653081. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 19972; Keriting Tinggi; NSGC 18849. Collected in Indonesia.
- PI 653082. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 24224; Khao Gaew; NSGC 18850. Collected in Thailand.
- PI 653083. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 12793; Kitrana 508; NSGC 18851. Collected in Madagascar.
- PI 653084. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 14957; LAC 23; NSGC 18852. Collected in Liberia.
- PI 653085. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 27762; Leung Pratew; NSGC 18853. Collected in Thailand.
- PI 653086. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 8191; Mansaku; NSGC 18854. Collected in Japan.
- PI 653087. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 12883; Mehr; NSGC 18855. Collected in Iran.
- PI 653088. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 38696; NPE 835; NSGC 18856. Collected in Pakistan.
- PI 653089. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 46531; Patnai 23; NSGC 18857.
- PI 653090. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 15092; RT 1031-69; NSGC 18858. Collected in Zaire.
- PI 653091. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 8177; RTS 4; NSGC 18859. Collected in Vietnam.
- PI 653092. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 5418; Sintane Diofor; NSGC 18860. Collected in Burkina Faso.
- PI 653093. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 6294; T 1; NSGC 18861. Collected in India.
- PI 653094. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 46768; T 26; NSGC 18862. Collected in India.
- PI 653095. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 8228; Tam Cau 9A; NSGC 18863. Collected in Vietnam.
- PI 653096. *Oryza sativa* L.**
Cultivated. IRRI-IRGC 10989; Tsipala 421; NSGC 18864. Collected in Madagascar.

PI 653097. *Oryza sativa* L.

Cultivated. IRRI-IRGC 10964; Vary Vato 426; NSGC 18865. Collected in Madagascar.

The following were donated by Wengui Yan, USDA-ARS-DBNRRC, 2890 Hwy 130 East, PO Box 1090, Stuttgart, Arkansas 72160-1090, United States; Kent S. McKenzie, California Rice Research Foundation, P.O. Box 306, Biggs, California 95917, United States. Received 03/13/2008.

PI 653098. *Oryza sativa* L.

Cultivar. "JOUIKU 393"; NSGC 18866. Developed in Japan.

The following were developed by Harvey K. Hall, Crop Research Division, DSIR, Riwaka Research Station, Rd 3, 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 08/11/1998.

PI 653099. *Rubus hybrid*

Cultivar. "Ranui"; 833158; CRUB 1971. Pedigree - Aurora x Marion.

Unknown source. Received 04/04/2000.

PI 653100. *Rubus idaeus* L.

Cultivar. CRUB 2127. Autumn Britten.-An early ripening, primocane-fruiting raspberry released for eastern Canada. Orig. in East Malling, Kent, U.K., by V.H. Knight, E. Keep, and J.H. Parker, Hort. Res. Intl. Sibling of Autumn Bliss, with complex derivation involving several red raspberry varieties and *Rubus arcticus*, *R. strigosus*, and *R. occidentalis*; tested as EM 3676 / 6; introd. in 1995. Plant variety rights held by Ontario Berry Growers Assn. and Hort. Res. Intl. Fruit: large; medium to dark red; firm; at times more uniform than Autumn Bliss; usually ripens a few days after Autumn Bliss; can be difficult to harvest in British Columbia but not in Ontario. Plant: yields similar to or slightly higher than Autumn Bliss; canes not as erect as Autumn Bliss some spines. Susceptible to infection by pollen transmission of raspberry bushy dwarf virus; gene A10 gives resistance to the four known strains of the European aphid vector of the raspberry mosaic virus complex. Autumn Britten originateritain. It ripens before Caroline and Heritage, bearing fruit from late summer through the fall. It has a very large, very firm and coherent berry that is flavorful. Autumn Britten has shown to be winter hardy in trials at Nourse Farms. Plant are moderately vigorous.

The following were donated by Indiana Berry and Fruit Co., 5218 West 500 S., Huntingburg, Indiana 47542, United States. Received 03/10/2005.

PI 653101. *Rubus idaeus* L.

Cultivar. "Caroline"; JCR-f1; CRUB 2308. Fall (primocane) bearing red raspberry with large, very sweet, firm fruit. Ripens before Heritage and is more resistant to root rots. Vigorous growth habit. Indiana Berry and Plant catalog.

The following were developed by Ken D. McPheeters, University of Illinois, 1701 S. Maryland, Urbana, Illinois 61801, United States; Robert Skirvin, University of Illinois, Dept of Horticulture, 258 Plant and Animal Biotech. Lab., Urbana, Illinois 61801, United States. Donated by Robert Skirvin, University of Illinois, Dept of Horticulture, 258 Plant and Animal Biotech. Lab., Urbana, Illinois 61801, United States. Received 08/03/2005.

PI 653102. *Rubus laciniatus* Willd.

Cultivar. "Everthornless"; CRUB 2310.

The following were developed by Herbert Stiles, Virginia Polytechnic Institute and State University, Southern Piedmont Agricultural Research and Education Center, PO Box 448, Blackstone, Virginia 23824, United States; Joseph A. Fiola, DNA Plant Technology Corporation, 2611 Branch Pike, Cinnaminson, New Jersey 08077, United States; Harry Jan Swartz, University of Maryland, Dept. Horticulture, Holzaphel Hall, College Park, Maryland 20742, United States; Brian R. Smith, University of Wisconsin, College of Agriculture, Dept. of Plant and Earth Sci., River Falls, Wisconsin 54022, United States. Donated by Nourse Farms, Inc., 41 River Road, South Deerfield, Massachusetts 01373, United States. Received 03/06/2006.

PI 653103. *Rubus idaeus* L.

Cultivar. CRUB 2323. The following is a detailed description of the new cultivar, including fruit production, together with the cultivar's morphological characteristics. The characteristics of the cultivar are compared to the standard used in the area: `Heritage`. This description is based on information provided by cooperating scientists from plants grown in fields at Queenstown, Md., Cream Ridge, N.J., Blackstone, Va. and River Falls, Wis., Rock Hall, Pa., and from plants grown in the greenhouse at College Park. &P> JEF-bl produces a moderate number of root- and crown-suckers. During the growing season, canes are light green colored, usually unbranched, semi-erect and moderately vigorous. Thorns are sparse, green, thin and usually less than 2 mm in see FIG. 3). Leaves have a R.H.S. (Royal Horticultural Society of London) Colour Chart number of 22A, are trifoliolate, and pentafoliolate on vigorous primocanes. Leaf serration is more complex than other eastern american raspberries, and is simila to `Glen Gerry`, a parent. `Glen Gerry` does not produce fall fruit and is thornless. Tips or serrations of JEF-bl leaves form more acute angles than those on leaves of `Heritage` and other fall bearing cultivars. JEF-bl leaf color is dark green. Fruit is borne on the top of the primocane in the fall season or from lateral buds at the base of winter canes. Fruit trusses are cymose clusters. Flowers are perfect and indistinguishable from other raspberry cultivars. Fruit are light yellow iolor, having R.H.S. Color Chart number 143A, firm, large, and very symmetrical. Druplets are held together tightly, and druplets will often tear before they separate from their neighbors. Fruit is round-conic, has an even collar, and readily separates from its torus as do other raspberries. The cavity width is slightly smaller than in other cultivars. Fruit has a mild-sweet flavor with a banana-aromatic flavor developing in cooler climates. The plant is field resistant to many.

The following were donated by Nourse Farms, Inc., 41 River Road, South Deerfield, Massachusetts 01373, United States. Received 03/06/2006.

PI 653104. *Rubus idaeus* L.
Cultivar. CRUB 2324.

PI 653105. *Rubus idaeus* L.
Cultivar. CRUB 2325.

PI 653106. *Rubus idaeus* L.
Cultivar. CRUB 2326. Polana is a cold tolerant northern red raspberry. Plants have shorter canes than most, and fill in rows quickly. Fruits are medium to large in size and full of the juiciest raspberry flavor. Polana's strong points are: Early, fall bearing, high yields because buds produce 2 fruiting laterals each and good fruit quality.

PI 653107. *Rubus idaeus* L.
Cultivar. CRUB 2327. 'Prelude' matures seven days earlier than standard early-season cultivars, in late June and early July,' said Maloney. It originated from a cross of NY 817 [Hilton x NY600 (Durham x September)] x 'Hilton', and was previously tested as NY 1009. Winter hardy in Zone 5, the plants of 'Prelude' are vigorous and sucker freely. 'Prelude' fruit average 2.2 grams per berry, are positioned openly with good placement, and are very easy to harvest. 'Prelude' also bears fruit on primocanes in the fall. The total average fall production is slightly less than 'Heritage' and the average fruit size is slightly higher. In test plots conducted at the Geneva Experiment Station, Kevin Maloney, who manages the program at Geneva, reports that plant vigor and fruit production of 'Prelude' has not declined when summer cropping annually.

The following were developed by Herbert Stiles, Virginia Polytechnic Institute and State University, Southern Piedmont Agricultural Research and Education Center, PO Box 448, Blackstone, Virginia 23824, United States; Joseph A. Fiola, DNA Plant Technology Corporation, 2611 Branch Pike, Cinnaminson, New Jersey 08077, United States; Harry Jan Swartz, University of Maryland, Dept. Horticulture, Holzaphel Hall, College Park, Maryland 20742, United States; Brian R. Smith, University of Wisconsin, College of Agriculture, Dept. of Plant and Earth Sci., River Falls, Wisconsin 54022, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 03/15/2006.

PI 653108. *Rubus idaeus* L.
Cultivar. CRUB 2330.

The following were developed by Reid G. Palmer, USDA, ARS, Iowa State University, Department of Agronomy, Ames, Iowa 50011, United States. Received 03/13/2008.

PI 653109. *Glycine max* (L.) Merr.
Genetic. Pureline. ASR-7-206; T377H; SY 804001. Pedigree - Germinal revertant recovered from T322 (PI 540533).

The following were developed by B. Todd Campbell, USDA-ARS, 2611 West Lucas Street, Florence, South Carolina 29501, United States. Received 03/12/2008.

PI 653110. *Gossypium hirsutum* L.

Breeding. Pureline. PD 98066. Pedigree - PD 5363/GA 88-186. Possesses outstanding fiber quality as determined by High Volume Instrument (HVI) testing. Average HVI values for fiber strength, fiber length, and micronaire are ~300 kN m kg⁻¹, ~29 mm, and ~4.6, respectively. Average HVI fiber uniformity index and fiber elongation values are greater than 82% and ~5.5% respectively. Is a full-season germplasm line possessing mid to late maturity and displays a medium to tall plant height (~100 cm) under dryland production conditions when no plant growth regulators are used. On average, produces a 38% gin turnout. Possesses lint yield potential similar to or just below commercial cultivars and is best adapted to the southeastern USA. Broad adaptation across the USA Upland cotton production region that warrants its use in regions other than the southeastern USA.

PI 653111. *Gossypium hirsutum* L.

Breeding. Pureline. PD 99035. GP-902. Pedigree - PD 93043/DPL 5409. Possesses outstanding fiber quality as determined by High Volume Instrument (HVI) testing. Average HVI values for fiber strength, fiber length, and micronaire are ~300 kN m kg⁻¹, ~29 mm, and ~4.5, respectively. Average HVI fiber uniformity index and fiber elongation values are greater than 82% and ~5.5 %, respectively. Full-season germplasm line possessing mid to late maturity and displays a medium to tall plant height (~100 cm) under dryland production conditions when no plant growth regulators are used. On average produces a 38% gin turnout. Possesses lint yield potential similar to or just below commercial cultivars and is best adapted to the southeastern USA. Has broad adaptation across the USA Upland cotton production region that warrants its use in regions other than the southeastern USA.

The following were developed by Brian G. Rossnagel, University of Saskatchewan, Crop Development Centre, 51 Campus Drive, Saskatoon, Saskatchewan S7N 5A8, Canada; Tom Zatorski, University of Saskatchewan, Crop Development Centre, Feed Barley & Oat Program, Saskatoon, Saskatchewan S7N 5A8, Canada; Aaron Beattie, University of Saskatchewan, Crop Development Centre, 51 Campus Drive, Saskatoon, Saskatchewan S7N 5A8, Canada; G. Arganosa, University of Saskatchewan, Crop Development Centre, Dept. of Plant Sciences, Saskatoon, Saskatchewan S7N 5A8, Canada. Received 03/06/2008.

PI 653112. *Hordeum vulgare* L. subsp. *vulgare*

Cultivar. Pureline. "CDC Lophy-I"; SR03044. CV-339; REST 653112. Pedigree - M2-635 / 4*CDC Freedom. Released 2007. CDC Lophy-I (CFIA Reg. No. 6335; Canadian PBR Appl. No. 06-5470) is a two-row spring hulless feed barley (*Hordeum vulgare* L.) developed at the Crop Development Centre (CDC), University of Saskatchewan, Saskatoon, Saskatchewan, Canada. CDC Lophy-I was tested as SR03044 in CDC yield trials from 2003-2004 before being evaluated from 2004-2005 in the Western Canadian Hulless Barley Cooperative Tests as HB379. CDC Lophy-I grain has 75% less phytate than conventional barley varieties and is the first commercially available Canadian low-phytate barley variety. Additionally, CDC Lophy-I combines good kernel weight and strong straw with improved Fusarium Head Blight (FHB; incited by *Fusarium graminearum* Schwabe) resistance, low deoxynivalenol (DON) accumulation and resistance to loose smut (incited by *Ustilago nuda* (Jens.) Rostr.).

The following were developed by Pioneer Hi-Bred International, Inc., Johnston, Iowa 50131, United States. Received 03/12/2008.

- PI 653113 PVPO. **Glycine max** (L.) Merr.
Cultivar. "RJS41001". PVP 200800136.
- PI 653114 PVPO. **Glycine max** (L.) Merr.
Cultivar. "RJS44001". PVP 200800137.
- PI 653115 PVPO. **Glycine max** (L.) Merr.
Cultivar. "RJS37002". PVP 200800138.
- PI 653116 PVPO. **Glycine max** (L.) Merr.
Cultivar. "RJS39001". PVP 200800139.
- PI 653117 PVPO. **Glycine max** (L.) Merr.
Cultivar. "RJS49001". PVP 200800140.
- PI 653118 PVPO. **Glycine max** (L.) Merr.
Cultivar. "RJS18001". PVP 200800141.
- PI 653119 PVPO. **Glycine max** (L.) Merr.
Cultivar. "RJS15001". PVP 200800142.
- PI 653120 PVPO. **Glycine max** (L.) Merr.
Cultivar. "RJS03001". PVP 200800143.
- PI 653121 PVPO. **Glycine max** (L.) Merr.
Cultivar. "RJS15002". PVP 200800144.
- PI 653122 PVPO. **Glycine max** (L.) Merr.
Cultivar. "RJS11001". PVP 200800145.
- PI 653123 PVPO. **Glycine max** (L.) Merr.
Cultivar. "RJS18002". PVP 200800146.
- PI 653124 PVPO. **Glycine max** (L.) Merr.
Cultivar. "RJS25001". PVP 200800147.
- PI 653125 PVPO. **Glycine max** (L.) Merr.
Cultivar. "RJS26001". PVP 200800148.
- PI 653126 PVPO. **Glycine max** (L.) Merr.
Cultivar. "RJS28001". PVP 200800149.
- PI 653127 PVPO. **Glycine max** (L.) Merr.
Cultivar. "RJS31001". PVP 200800150.
- PI 653128 PVPO. **Glycine max** (L.) Merr.
Cultivar. "RJS33001". PVP 200800151.
- PI 653129 PVPO. **Glycine max** (L.) Merr.
Cultivar. "RJS34002". PVP 200800152.
- PI 653130 PVPO. **Glycine max** (L.) Merr.
Cultivar. "RJS34001". PVP 200800153.

PI 653131 PVPO. *Glycine max* (L.) Merr.
Cultivar. "RJS36001". PVP 200800154.

The following were collected by Sergey Shuvalov, N.I. Vavilov Research Institute of Plant Industry, Foreign Relations, 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 653132. *Vigna unguiculata* (L.) Walp.
Cultivated. TJK04:4-037; ICARDA 140071; IG 139479; W6 26217. Collected 07/16/2004 in Tajikistan. Latitude 37° 39' 41" N. Longitude 68° 8' 23" E. Elevation 457 m. Kurgan Tyu Province. Yangibod village 30 km S of Shortugay village along Uzbek border. 2% slope F: Material taken from several farm stores. Irrigated village.

The following were collected by Dajue Li, Beijing Botanical Garden, Institute of Botany, Chinese Academy of Science, Beijing, Beijing, China. Received 01/30/1989.

PI 653133. *Carthamus tinctorius* L.
Cultivated. BJ-187; Honghua; W6 123. Collected 02/1981 in Anhui, China. Wuhu City, Anhui Province. Growing period 96 days. Plants 71.6cm tall, very spiny. Branching angle 51.9 degrees. Head diameter-2.5cm. Flowers orange. 100 seed weight-3.8g. Oil content-22.65%.

PI 653134. *Carthamus tinctorius* L.
Cultivated. BJ-252; Honghua; W6 222. Collected in Shandong, China. Chengwu County, Shandong Province. Growing period 105 days. Plants 77.2cm tall, spiny. Branching angle 50 deg. Head diameter-2.14cm. Flowers orange. 100 seed weight-5.4g. Oil content 24.05%.

PI 653135. *Carthamus tinctorius* L.
Cultivated. BJ-82; Honghua; W6 246. Collected 03/1980 in Hebei, China. Jinxian County, Hebei Province. Growing period 106 days. Plants 76.7cm tall, spineless. Branching angle 46 degrees. Head diameter-2.05cm. Flowers red. 100 seed weight-4.0g. Oil content-20.31%. Linoleic acid-76.3%. Stearic acid-2.0%. Oleic acid-14.5%. Palmitic acid-7.1%.

The following were donated by Paul F. Knowles, 5703 Nakat Way, Blaine, Washington 98230, United States. Received 03/06/1989.

PI 653136. *Carthamus tinctorius* L.
Cultivated. 81/351/BS; W6 791. Have brittle stems that break easily and cleanly when bent. They have genotype brbr. Remarks donor used to identify this accession: brittle stem, sprawling.

PI 653137. *Carthamus tinctorius* L.
Cultivated. 81/368/BS; W6 796. Vary in leaf expression, mostly in color. Remarks donor used to identify this accession: yellow green leaves, B1 when ripe.

- PI 653138. *Carthamus tinctorius* L.**
Cultivated. 81/U55/BS; W6 813. Vary mostly in flower color. Closed flower types may have ornamental purposes, but most of them set very little seed when selfed. Remarks donor used to identify this accession: very light orange flowers.
- PI 653139. *Carthamus tinctorius* L.**
Cultivated. 81/U62/BS; W6 814. Vary mostly in flower color. Closed flower types may have ornamental purposes, but most of them set very little seed when selfed. Remarks donor used to identify this accession: very light orange flowers.
- PI 653140. *Carthamus tinctorius* L.**
Cultivated. 80/403/BS; W6 817. Vary mostly in flower color. Closed flower types may have ornamental purposes, but most of them set very little seed when selfed. Remarks donor used to identify this accession: good ornamental type, larger head.
- PI 653141. *Carthamus tinctorius* L.**
Cultivated. 81/382/BOP; W6 827. Autotetraploides, most setting very little seed when selfed. Remarks donor used to identify this accession: autotetraploids.
- PI 653142. *Carthamus tinctorius* L.**
Cultivated. 81/382/40p; W6 828. Autotetraploides, most setting very little seed when selfed. Remarks donor used to identify this accession: autotetraploids.
- PI 653143. *Carthamus tinctorius* L.**
Cultivated. 82/66/70p; W6 902. Have high levels of iodine value and/or high fatty acid composition. Remarks donor used to identify this accession: Portugal X high stearic, appressed branches.
- PI 653144. *Carthamus tinctorius* L.**
Cultivated. 80/561-2/op; W6 908. Mixture of male-sterile type: male-sterile(msms) and male-fertile(Msms), propagated by crossing msms and Msms. Remarks donor used to identify this accession: male-sterile, UC-148.
- PI 653145. *Carthamus tinctorius* L.**
Cultivated. 80-10; W6 967. Collected in China.
- PI 653146. *Carthamus tinctorius* L.**
Cultivated. 80-11; W6 968. Collected in China.
- PI 653147. *Carthamus tinctorius* L.**
Cultivar. "EARLY RUSSIAN"; W6 969. Developed in China.
- PI 653148. *Carthamus tinctorius* L.**
Cultivar. "HETIAN HONGHUA"; 80-58; W6 970. Developed in China.
- PI 653149. *Carthamus tinctorius* L.**
Cultivar. "HETIAN WUC"; 80-59; W6 971. Developed in China.
- PI 653150. *Carthamus tinctorius* L.**
Cultivar. "SHUFU HONGHUA"; 80-60; W6 972. Developed in China.

PI 653151. *Carthamus tinctorius* L.
Cultivar. "FUHANG HONGHUA"; 81-1; W6 973. Developed in China.

PI 653152. *Carthamus tinctorius* L.
Cultivar. "ZIYANG YOUCI"; 81-2; W6 974. Developed in China.

PI 653153. *Carthamus tinctorius* L.
Cultivar. "YONGCHENG HONGHUA"; 81-3; W6 975. Developed in China.

PI 653154. *Carthamus tinctorius* L.
Cultivar. "BANCI HONGHUA"; 81-4; W6 976. Developed in China.

The following were donated by David D. Rubis, University of Arizona, Dept. of Plant Sciences, Tucson, Arizona 85721, United States. Received 07/18/1989.

PI 653155. *Carthamus tinctorius* L.
Breeding. R7136-2; 1071; W6 1025.

The following were donated by USDA-ARS/Utah Agric. Exp. Station, Logan, Utah, United States. Received 1962.

PI 653156. *Carthamus tinctorius* L.
Cultivated. NSL 15398; W6 12756; NO 55-624.

The following were donated by Dajue Li, Beijing Botanical Garden, Institute of Botany, Chinese Academy of Science, Beijing, Beijing, China. Received 02/22/1995.

PI 653157. *Carthamus tinctorius* L.
Cultivar. BJ-20; W6 16758; DUNHUANG HONHUA.

PI 653158. *Carthamus tinctorius* L.
Cultivar. BJ-53; W6 16759; ZHANGYE YOUCI.

PI 653159. *Carthamus tinctorius* L.
Cultivated. BJ-58; W6 16760.

PI 653160. *Carthamus tinctorius* L.
Cultivar. BJ-60; W6 16761; ZHANGYE WUCI.

PI 653161. *Carthamus tinctorius* L.
Cultivar. BJ-84; W6 16762; JIMUSAER HONHUA.

PI 653162. *Carthamus tinctorius* L.
Cultivated. BJ-85; W6 16763.

PI 653163. *Carthamus tinctorius* L.
Cultivated. BJ-95; W6 16765.

PI 653164. *Carthamus tinctorius* L.
Cultivated. BJ-100; W6 16767.

- PI 653165. *Carthamus tinctorius* L.
Cultivated. BJ-110; W6 16768.
- PI 653166. *Carthamus tinctorius* L.
Cultivar. BJ-112; W6 16769; FUKANG HONHUA.
- PI 653167. *Carthamus tinctorius* L.
Cultivated. BJ-114; W6 16770.
- PI 653168. *Carthamus tinctorius* L.
Cultivated. BJ-115; W6 16771.
- PI 653169. *Carthamus tinctorius* L.
Cultivar. BJ-117; W6 16772; WULUMUQI HONHUA.
- PI 653170. *Carthamus tinctorius* L.
Cultivar. BJ-118; W6 16773; WUSU HONHUA.
- PI 653171. *Carthamus tinctorius* L.
Cultivated. BJ-119; W6 16774.
- PI 653172. *Carthamus tinctorius* L.
Cultivar. BJ-125; W6 16775; ZIKE HONHUA.
- PI 653173. *Carthamus tinctorius* L.
Cultivar. BJ-143; W6 16777; JIANYANG HONHUA.
- PI 653174. *Carthamus tinctorius* L.
Cultivar. BJ-145; W6 16778; JIANYANG WUCI.
- PI 653175. *Carthamus tinctorius* L.
Cultivar. BJ-149; W6 16779; SAFEILA HONHUA.
- PI 653176. *Carthamus tinctorius* L.
Cultivar. BJ-153; W6 16781; HUOCHENG HONHUA.
- PI 653177. *Carthamus tinctorius* L.
Cultivated. BJ-155; W6 16782.
- PI 653178. *Carthamus tinctorius* L.
Cultivar. BJ-166; W6 16783; HEFEI HONHUA.
- PI 653179. *Carthamus tinctorius* L.
Cultivar. BJ-167; W6 16784; 78-1 HONHUA.
- PI 653180. *Carthamus tinctorius* L.
Cultivated. BJ-169; W6 16785.
- PI 653181. *Carthamus tinctorius* L.
Cultivar. BJ-176; W6 16787; FUZHU HONHUA.
- PI 653182. *Carthamus tinctorius* L.
Cultivar. BJ-184; W6 16788; ZHECHENG HONHUA.
- PI 653183. *Carthamus tinctorius* L.
Cultivar. BJ-189; W6 16789; DUKOU HONHUA.

- PI 653184. *Carthamus tinctorius* L.
Cultivar. BJ-196; W6 16790; BAYANZAOER HONHUA.
- PI 653185. *Carthamus tinctorius* L.
Cultivar. BJ-199; W6 16792; YZUOYING HONHUA.
- PI 653186. *Carthamus tinctorius* L.
Cultivar. BJ-207; W6 16793; XINCHANG HONHUA.
- PI 653187. *Carthamus tinctorius* L.
Cultivar. BJ-231; W6 16794; YANJIN HONHUA.
- PI 653188. *Carthamus tinctorius* L.
Cultivar. BJ-295; W6 16795; ZHECHENG HONHUA.
- PI 653189. *Carthamus tinctorius* L.
Cultivar. BJ-308; W6 16796; HUAXIAN HONHUA.
- PI 653190. *Carthamus tinctorius* L.
Cultivar. BJ-322; W6 16797; XIANGSHANG HONHUA.
- PI 653191. *Carthamus tinctorius* L.
Cultivar. BJ-349; W6 16798; JIANDE HONHUA.
- PI 653192. *Carthamus tinctorius* L.
Cultivated. BJ-365; W6 16799.
- PI 653193. *Carthamus tinctorius* L.
Cultivar. BJ-376; W6 16800; BACHU HONHUA.
- PI 653194. *Carthamus tinctorius* L.
Cultivar. BJ-377; W6 16801; JIMUSAER YOUCI.
- PI 653195. *Carthamus tinctorius* L.
Cultivar. BJ-379; W6 16802; TACHENG HONHUA.
- PI 653196. *Carthamus tinctorius* L.
Cultivar. BJ-382; W6 16803; CHANGJI HONHUA.
- PI 653197. *Carthamus tinctorius* L.
Cultivar. BJ-406; W6 16804; TONGJIANG WUCI.
- PI 653198. *Carthamus tinctorius* L.
Cultivar. BJ-408; W6 16805; WUZHONG HONHUA.
- PI 653199. *Carthamus tinctorius* L.
Cultivar. BJ-656; W6 16807; BAOJING HONHUA.
- PI 653200. *Carthamus tinctorius* L.
Cultivar. BJ-658; W6 16808; ZHONGQING HONHUA.
- PI 653201. *Carthamus tinctorius* L.
Cultivar. BJ-2176; W6 16810; N-5.
- PI 653202. *Carthamus tinctorius* L.
Cultivar. BJ-2184; W6 16816; N-777.

PI 653203. *Carthamus tinctorius* L.
Cultivar. BJ-2250; W6 16835; CH-65.

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 653204. *Carthamus tinctorius* L.
Wild. E94195; W6 18120. Collected 09/1994 in Mongolia. Latitude 48° 3' 56" N. Longitude 104° 36' E. Elevation 564 m. Small research area on outskirts of Choibalsan City operated by Ministry of Agriculture to test vegetables from throughout the world. Approximately 2 ha, fenced, and irrigated with water from Herlen River. Grass steppe (cultivated river terrace). Light brown, loamy river terrace soils with high gravel content. Aspect and slope horizontal.

The following were developed by Li Dajue, Hortus Botanicus Pekinensis, Instituti Botanici Academiae Sinicae, Beijing, Beijing, China. Donated by Richard C. Johnson, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 09/08/2000.

PI 653205. *Carthamus tinctorius* L.
Breeding. FO-2; W6 23108. selected for cold tolerance.

PI 653206. *Carthamus tinctorius* L.
Breeding. FO-4; W6 23110. selected for cold tolerance.

PI 653207. *Carthamus tinctorius* L.
Breeding. FO-5; W6 23111. selected for cold tolerance.

PI 653208. *Carthamus tinctorius* L.
Breeding. FO-6; W6 23112. selected for cold tolerance.

PI 653209. *Carthamus tinctorius* L.
Breeding. FO-7; W6 23113. selected for cold tolerance.

PI 653210. *Carthamus tinctorius* L.
Breeding. FO-8; W6 23114. selected for cold tolerance.

PI 653211. *Carthamus tinctorius* L.
Breeding. FO-11; W6 23117. selected for cold tolerance.

PI 653212. *Carthamus tinctorius* L.
Breeding. FO-12; W6 23118. selected for cold tolerance.

PI 653213. *Carthamus tinctorius* L.
Breeding. FO-13; W6 23119. selected for cold tolerance.

PI 653214. *Carthamus tinctorius* L.
Breeding. FO-15; W6 23121. selected for cold tolerance.

PI 653215. *Carthamus tinctorius* L.
Breeding. FO-17; W6 23123. selected for cold tolerance.

PI 653216. *Carthamus tinctorius* L.

Breeding. FO-42; W6 23124. selected for cold tolerance.

The following were developed by Chen Yuehua, Institute of Industrial Crops, Xinjiang Academy of Agricultural Sciences, 38 Nanchang Road, Urumqi, Xinjiang 830000, China. Donated by Richard C. Johnson, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 09/08/2000.

PI 653217. *Carthamus tinctorius* L.

Landrace. XJ-017; W6 23126.

PI 653218. *Carthamus tinctorius* L.

Landrace. XJ-040; W6 23127.

PI 653219. *Carthamus tinctorius* L.

Landrace. XJ-072; W6 23130.

PI 653220. *Carthamus tinctorius* L.

Cultivated. Xinghonghua 3; W6 23131.

The following were donated by Kang Bo Shim, National Genebank for Crop and Microorganism, 225, Seodon-Dong, Kwenonsun-Ku, Suwon, Kyonggi 441-707, Korea, South. Received 04/10/2003.

PI 653221. *Carthamus tinctorius* L.

Wild. Kor 1; W6 24305. Collected in Korea, South. Southern part of Euseong.

PI 653222. *Carthamus tinctorius* L.

Wild. Kor 2; W6 24306. Collected in Korea, South. Southern part of Sangju.

PI 653223. *Carthamus tinctorius* L.

Wild. Kor 3; W6 24307. Collected in Korea, South. Middle part of Kyeonggi.

PI 653224. *Carthamus tinctorius* L.

Wild. Kor 4; W6 24308. Collected in Korea, South. Middle part of Kyeonggi.

PI 653225. *Carthamus tinctorius* L.

Wild. Kor 5; W6 24309. Collected in Korea, South. Middle part of Bukhan.

PI 653226. *Carthamus tinctorius* L.

Wild. Kor 6; W6 24310. Collected in Korea, South. Southern part of Hamyang.

PI 653227. *Carthamus tinctorius* L.

Wild. Kor 7; W6 24311. Collected in Korea, South. Middle part of Ulrung.

PI 653228. *Carthamus tinctorius* L.

Wild. Kor 8; W6 24312. Collected in Korea, South. Southern part of Naju.

PI 653229. *Carthamus tinctorius* L.

Wild. Kor 9; W6 24313. Collected in Korea, South. Middle part of Yeongju.

PI 653230. *Carthamus tinctorius* L.

Wild. Kor 10; W6 24314. Collected in Korea, South. Southern part of Namwon.

The following were collected by O.W. Norvell, Stanford University, Palo Alto, California, United States. Received 01/01/1989.

PI 653231. *Phaseolus glabellus* Piper

Wild. M176; W6 15588. Collected 1983 in Mexico.

The following were donated by O.W. Norvell, Stanford University, Palo Alto, California, United States. Received 01/01/1989.

PI 653232. *Phaseolus acutifolius* A. Gray

Uncertain. M570; W6 15687. Collected in Mexico.

PI 653233. *Phaseolus microcarpus* Mart.

Uncertain. M802; W6 15701.

PI 653234. *Phaseolus microcarpus* Mart.

Uncertain. M810; W6 15702.

PI 653235. *Phaseolus acutifolius* A. Gray

Wild. M915; W6 15713. 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 653236. *Phaseolus acutifolius* A. Gray

Uncertain. M930; W6 15723.

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 653237. *Phaseolus augusti* Harms

Wild. A2-010-1; Poroto del monte; W6 18745. Collected 05/07/1996 in Argentina.

The following were collected by Kenneth Norris, 725 Mary Jane Street, Lebanon, Illinois 62254-1339, United States. Received 04/1997.

PI 653238. *Phaseolus vulgaris* L.

Cultivated. Hillbilly Beans; W6 19915. Collected 04/1997 in Illinois, United States. Grown in the garden of cooperater in Lebanon, IL. Originally seed came from Ozark Hills of South Missouri near Springfield. Beans have strings and form little beans early. Tend to climb to 2-3 feet tall. Massive producers of beans, resist harsh growing weather, are very fertile with good (and short) germination

time. Flowers are a good sized blue-purple bloom. Seeds are striped brown and tan and some are solid colored (brown or black).

The following were collected by Gary Nabhan, Native Seeds/SEARCH, 3950 W. New York Drive, Tucson, Arizona 85745, United States. Received 1985.

PI 653239. *Phaseolus acutifolius* A. Gray var. *acutifolius*

Wild. GN 780; W6 20125. Collected 1985. Rare seed.

PI 653240. *Phaseolus maculatus* Scheele

Wild. GN 735; W6 20126. Collected 1985.

PI 653241. *Phaseolus acutifolius* var. *tenuifolius* A. Gray

Wild. G40 181; GN 8442; W6 20137. Collected 1985 in Arizona, United States. Latitude 31° 57' 37" N. Longitude 111° 35' 50" W. Elevation 1300 m. Pima County. Kitt Peak. Canyon. 30-45% slope. Boulder and scree.

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 653242. *Phaseolus dumosus* Macfad.

Wild. 3067; W6 20514. Collected 01/1995 in Guatemala. Latitude 14° 38' N. Longitude 91° 7' W. Elevation 1630 m. San Lucas Toliman, 3 km northeast junction to San Lucas highway 11 to Godinez.

PI 653243. *Phaseolus dumosus* Macfad.

Wild. 3078; W6 20520. Collected 01/1995 in Guatemala. Latitude 14° 46' N. Longitude 91° 29' W. Elevation 2050 m. Almolonga, 4 km southeast of Almolonga.

PI 653244. *Phaseolus coccineus* L.

Wild. 3084; W6 20524. Collected 01/1995 in Guatemala. Latitude 14° 45' N. Longitude 91° 31' W. Elevation 1760 m. Zunil, 1.5 km northeast of Estancia de la Cruz, Aguas Amargas.

The following were donated by Lubov N. Kobyseva, National Centre of Plant Genetic Resources of Ukraine, Institute of Plant Production, n.a. V.Y. Yurjev of UAAS, Kharkiv, Kharkiv 61060, Ukraine. Received 12/30/1998.

PI 653245. *Phaseolus vulgaris* L.

Cultivated. Krasnograds'ka 6; IRO0576; W6 21040. Matures in 84-94 days, resistant resistances to Fusarium, resistant resistances to bacterial blight, moderate resistances to drought, yield 270 grams per meter.

PI 653246. *Phaseolus vulgaris* L.

Cultivated. Lastochka; IRO0889; W6 21043. Matures in 78-96 days, moderate resistances to Fusarium, moderate resistances to bacterial blight, resistant resistances to drought, yield 261 grams per square meter.

The following were collected by Leon de la Luz, Mexico. Donated by G. F. Freytag, USDA, ARS, Tropical Agricultural Research Station, P.O. Box 70, Mayaguez, Puerto Rico. Received 1989.

PI 653247. *Phaseolus carteri* Freytag & Debouck

Wild. G40675; Leon 3751; TARS 535; LEON DE LA LUZ 3751; W6 21124; W6 23650. Collected 1989 in Baja California, Mexico. Latitude 24° 3' 36" N. Longitude 110° 7' 12" W. Close to San Pedro, 12 km south of La Paz. According to G. Freytag, de la Luz sent seed to TARS, Mayaguez, Puerto Rico. This germplasm was the key to describing the new taxon, *Phaseolus carteri*.

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 653248. *Phaseolus lunatus* L.

Uncertain. DLEG 900234; W6 23663. Collected in Chiapas, Mexico. Received from Dr. T. Vanderborght, Natl. Botanic Garden of Belgium. NI 0650. Accession has been regenerated.

PI 653249. *Phaseolus acutifolius* var. *tenuifolius* A. Gray

Wild. DLEG 990123; W6 23677.

The following were donated by International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Received 10/2001.

PI 653250. *Phaseolus parvifolius* Freytag

Wild. DGD-2434; G40186; W6 23681. Collected 2001 in Jalisco, Mexico. Latitude 14° 40' N. Longitude 89° 0' 29" W. Elevation 1160 m. San Pedro Pin county, Mexico.

The following were donated by Mathew B. Johnson, University of Arizona, Desert Legume Program, 2120 East Allen Road, Tucson, Arizona 85719, United States. Received 1989.

PI 653251. *Phaseolus acutifolius* var. *tenuifolius* A. Gray

Wild. W6 25022; DLEG 890041. Collected 09/19/1984 in Arizona, United States. Latitude 31° 23' 46" N. Longitude 111° 11' 24" W. Santa Cruz Co., Sycamore Canyon, Pajarito Mts. Annual vine, drought tolerant. Received from Arizona Sonora Desert Museum. ASDM 1984-121. Accession has been regenerated.

PI 653252. *Phaseolus acutifolius* var. *tenuifolius* A. Gray

Wild. W6 25033; DLEG 900550. 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 Camille Getz, P.O. Box 167, Monte Vista, Colorado 81144, United States. Received 04/27/2004.

PI 653253. *Phaseolus coccineus* L.

Cultivated. W6 25193. White seeded beans. Reported to have originated from clay pots found in a cave in northern New 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; Sul Ross State University, P.O. Box C-114, Alpine, Texas 79832, United States. Received 01/26/2005.

PI 653254. *Phaseolus acutifolius* A. Gray

Uncertain. W6 26650.

The following were developed by James R. Baggett, Oregon State University, Department of Horticulture, Cordley Hall 2042, Corvallis, Oregon 97331-2911, United States; Deborah Kean, Oregon State University, Department of Horticulture, Ag & Life Sciences 4017, Corvallis, Oregon 97331-7304, United States; James R. Myers, Oregon State University, Department of Horticulture, 4017 Ag Life Sciences Building, Corvallis, Oregon 97331-7304, United States. Received 05/01/2006.

PI 653255. *Phaseolus vulgaris* L.

Genetic. "OSU5630"; W6 27743. Pedigree - OSU5630 is a bush blue lake green bean from the cross OR 54 (OSU 5402) x OR 91G. similar to OR 91G in most attributes, but has higher yield and better processing quality.

The following were developed by R.E. Hayes, University of Idaho, Kimberly Res. and Ext. Ctr., 3793 North 3600 East, Kimberly, Idaho 83341, United States; Shree P. Singh, University of Idaho, Kimberly Research & Extension Ctr., 3793 North 3600 East, Kimberly, Idaho 83341-5076, United States; M.F. Dennis, University of Idaho, Kimberly Res. & Ext. Ctr., 3793 North 3600 East, Kimberly, Idaho 83341, United States; H. Teran, University of Idaho, Kimberly Research & Extension Center, 3793 North 3600 East, Kimberly, Idaho 83341, United States; Margarita Lema, Mision Biologica de Galicia, Carballeira 8, 36143 Salcedo, Pontevedra, Spain; Craig Robinson, University of Idaho, Parma Research & Extension Center, 29603 U of I Lane, Parma, Idaho 83660, United States. Received 03/19/2008.

PI 653256. *Phaseolus vulgaris* L.

Cultivar. Pureline. "KIMBERLY". CV-283. Pedigree - Kimberly was derived from the double-cross Poncho /G 17341// Kodiak /BelDakMi-RMR-14. F2 was grown at Parma (ID). A single plant with light-colored pinto seed was selected. F3 was grown at Kimberly (ID) where a single plant with resistance to the US-6 strain of BCMV and light-colored pinto seed was selected. F4 was grown at Kimberly and plants with light-colored pinto seed were harvested in bulk. A single-plant selection for light-colored pinto seed was made in F5 at Parma. The F6 was grown at Kimberly and all plants were harvested in bulk followed by seed increase at Kimberly. Light colored slow darkening pinto Kimberly dry bean has an indeterminate semi-prostrate growth habit Type III with medium to large vine. Shape of the central leaflet of fully developed trifoliolate leaf is ovate with an average length of 10.5 cm and width of 8.0 cm. The flower bracteoles are medium-sized ovate shape. Flower color is white with the absence of stripes at the outer base of the standard. Kimberly is a full-season cultivar with mean of 97 d in southern Idaho. Average

yield of Kimberly was 2323 lbs A-1 in southern Idaho in 2005 and 2006. Its 100-seed weighed 34 g. After eight months of storage Kimberly had seed coat darkening score of 5 compared to 6 for Othello, 7 for Poncho, and 9 for Kodiak. Kimberly has resistance to the NY-15 and US-6 strains of BCMV and the NL-3K strain of BCMNV. Such phenotypic reaction would indicate that Kimberly possesses the recessive gene *bc-3* that imparts resistance against all known strains of BCMV and BCMNV. Kimberly also has the SCAR marker SW 13 indicating the presence of dominant *I* gene imparting resistance to all known strains of BCMV. Thus, Kimberly would be among the first publicly released pinto cultivars to carry that combination of pyramided resistance genes. Kimberly is also resistant to the race 38 of *U. appendiculatus*. However, Kimberly exhibits an intermediate reaction or small pustules when exposed to the rust pathogen race 53. Kimberly is moderately tolerant to Fusarium root rot and Beet curly top virus. Kimberly is susceptible to anthracnose, common bacterial blight, halo blight, and white mold. Kimberly has moderate to high levels of resistance to heat and intermittent drought stresses. However, Kimberly is highly susceptible to severe soil zinc deficiency and manganese toxicity hence planting in such soils without supplemental fertilizer should be avoided. Kimberly was developed for 100 days frost-free bean production regions of southern Idaho. Kimberly also has exhibited a broad adaptation in the USA.

The following were developed by Shree P. Singh, University of Idaho, Kimberly Research & Extension Ctr., 3793 North 3600 East, Kimberly, Idaho 83341-5076, United States. Received 03/19/2008.

PI 653257. *Phaseolus vulgaris* L.

Cultivar. Pureline. "SHOSHONE". CV-284. Pedigree - Shoshone was selected from multiple-parent cross H9657-42-2/3/ Poncho /G17341// Kodiak /BelDakMi-RMR-14. F1 was screened for BCMV at Kimberly, Idaho. An early maturing resistant plant with light pinto seed was harvested. In F2, early maturing plants with light pinto seed were bulk harvested. In F3, an early maturing BCMV, BCMNV and rust resistant plant with light pinto was harvested. In F4, all early maturing plants with light pinto seed color were harvested in bulk followed by seed increase. Light colored slow darkening pinto Shoshone dry bean has an indeterminate semi-prostrate growth habit Type III with small to medium length vine. The average length of the central leaflet of fully developed trifoliolate leaf is 9 cm and width 7 cm. The flower bracteoles are large chordate. Flower color is white with the absence of stripes at the outer base of the standard. Shoshone has mean maturity of 94 d in southern Idaho. Average yield of Shoshone was 2132 lbs A-1 in southern Idaho, 1852 lbs A-1 in the western USA and 2607 lbs A-1 across 10 locations in the USA and Canada. Mean weight of the 100 seeds of Shoshone was 36 g in southern Idaho. After eight months of storage at room temperature Shoshone had seed coat darkening score of 4 compared to 6 for Othello, 7 for Poncho, and 9 for Kodiak. Shoshone has resistance to the NY-15 and US-6 strains of BCMV and the NL-3K strain of BCMNV. Shoshone also has the SCAR marker SW 13 thus indicating that it possesses the *bc-3* and *I* genes imparting resistance to all known strains of BCMV and BCMNV. Shoshone is also resistant to the race 38 of *U. appendiculatus*. However, Shoshone exhibits an intermediate reaction or small pustules when exposed to the rust pathogen race 53. Shoshone is moderately tolerant to Fusarium root rot and BCTV. Shoshone is susceptible to anthracnose, common bacterial blight, halo blight, and

white mold. Shoshone has high levels of resistance to heat and intermittent drought. Shoshone is highly susceptible to severe soil zinc deficiency and manganese toxicity. Shoshone was developed for 90 to 95 days frost-free bean production regions of southern Idaho. Shoshone also has exhibited a broad adaptation in warmer bean growing environments in the Western and Mid-western USA and Canada.

The following were developed by R.E. Hayes, University of Idaho, Kimberly Res. and Ext. Ctr., 3793 North 3600 East, Kimberly, Idaho 83341, United States; Shree P. Singh, University of Idaho, Kimberly Research & Extension Ctr., 3793 North 3600 East, Kimberly, Idaho 83341-5076, United States; M.F. Dennis, University of Idaho, Kimberly Res. & Ext. Ctr., 3793 North 3600 East, Kimberly, Idaho 83341, United States; H. Teran, University of Idaho, Kimberly Research & Extension Center, 3793 North 3600 East, Kimberly, Idaho 83341, United States; Margarita Lema, Mision Biologica de Galicia, Carballeira 8, 36143 Salcedo, Pontevedra, Spain; Craig Robinson, University of Idaho, Parma Research & Extension Center, 29603 U of I Lane, Parma, Idaho 83660, United States. Received 03/19/2008.

PI 653258. *Phaseolus vulgaris* L.

Cultivar. Pureline. "HUNGERFORD". CV-285. Pedigree - Hungerford was derived from double-cross Matterhorn / Starlight // Beryl / Weihing . A single plant with extra-large white seed was selected in F2. All plants in F3 selected for extra-large white seed were harvested in bulk followed by a single plant selection in F4. In F5, all selected plants were harvested in bulk followed by seed increase. Subsequently, it was screened for NL-3K strain of BCMNV, NY-15 and US-6 strains of BCMV, races 38 and 53 of *U. appendiculatus* and SCAR marker SW 13. Extra-large-seeded Hungerford great northern dry bean has an indeterminate semi-prostrate growth habit Type III with medium to large vine. The central leaflet of fully developed trifoliolate leaf is of ovate shape with average length of 9.5 cm and width of 7.5 cm. The flower bracteoles are of chordate shape and medium size. Flower color is white with the absence of stripes at the outer base of the standard. Pods of Hungerford at maturity are flat and curved with curved-down beak, tan or yellowish-brown with light purple stripes and an average of 4-5 seeds. Hungerford has mean maturity of 95 d in southern Idaho with yield of 1995 lbs A-1. Mean 100-seed weight of Hungerford was 40 g in Idaho and 44 g in the Western Regional Bean Trial. Hungerford has the dominant I gene resistance to BCMV strains NY-15 and US-6. However, when inoculated with the BCMNV strain NL-3K, Hungerford exhibits top or systemic necrosis including black root. It has SCAR marker SW 13. Hungerford is resistant to race 38 of *U. appendiculatus*, but exhibits small pustules when exposed to race 53. Hungerford is susceptible to anthracnose, common bacterial blight, *Fusarium* root rot, halo blight, and white mold. Hungerford is moderately susceptible to BCTV. Hungerford has moderate to high levels of resistance to heat, intermittent drought, and to soil zinc deficiency and manganese toxicity. Hungerford was developed for 95 to 100 days frost-free bean production regions of southern Idaho. However, Hungerford has exhibited a broad adaptation in relatively warmer bean growing environments in the Western USA. Because of its semi-prostrate growth habit and lack of resistance to anthracnose and white mold Hungerford may have limited adaptation in or not suited to the relatively cool and wet production environments.

PI 653259. Phaseolus vulgaris L.

Cultivar. Pureline. "SAWTOOTH". CV-286. Pedigree - Sawtooth was derived from Matterhorn / Starlight // Beryl / Weihing cross. A single plant with extra-large white seed was selected in F2. A single plant resistant to US-6 strain of BCMV was selected in F3. F4 was bulk harvested. A single-plant was selected in F5. BCMV resistant plants were bulk harvested in F6 followed by seed increase. Subsequently, it was screened for NL-3K strain of BCMNV, NY-15 and US-6 strains of BCMV, races 38 and 53 of *U. appendiculatus* and SCAR marker SW 13. Extra large-seeded Sawtooth great northern dry bean has an indeterminate semi-prostrate growth habit Type III with medium to large vine. The central leaflet of fully developed trifoliolate leaf is of ovate shape with average length of 10 cm and width of 8 cm. The flower bracteoles are large chordate. Flower color is white with the absence of stripes at the outer base of the standard. Pods of Sawtooth are distributed along the stem length and branches. At maturity, pods are smooth tan or yellowish-brown color without stripes. Dry pods are flat, slightly curved with straight to curved-down beak. Also, pods may have slight constrictions with an average of 5-6 seeds. Sawtooth has mean maturity of 96 d in southern Idaho with yield of 2219 lbs A-1 and 99 d in Western Regional Bean Trial (WRBT) with yield of 2333 lbs A-1. Mean 100-seed weight was 40 g in Idaho and 45 g in the WRBT. Sawtooth has the dominant I gene resistance to BCMV strains NY-15 and US-6. However, when inoculated with the BCMNV strain NL-3K, Sawtooth exhibits top or systemic necrosis including black root. It has SCAR marker SW 13. Sawtooth is resistant to race 38 of *U. appendiculatus*, but exhibits small pustules when exposed to race 53. Sawtooth is susceptible to anthracnose, common bacterial blight, *Fusarium* root rot, halo blight, and white mold. Sawtooth is moderately susceptible to BCTV. Sawtooth has moderate to high levels of resistance to heat, intermittent drought, and to soil zinc deficiency and manganese toxicity. Sawtooth is a full-season cultivar developed for 100 d frost-free bean production regions of southern Idaho. However, Sawtooth has exhibited a broad adaptation in relatively warmer bean growing environments in the Western USA. Because of its semi-prostrate growth habit and lack of resistance to anthracnose and white mold Sawtooth may have limited adaptation in or not suited to the relatively cool and wet production environments.

The following were developed by James S. Quick, Colorado State University, Soil and Crop Sciences, Fort Collins, Colorado 80523, 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; Xianming Chen, USDA-ARS, WSU - Wheat Genetics Unit, PO Box 646430, Pullman, Washington 99164-6430, 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; Guihua Bai, USDA-ARS, 4008 Throckmorton Hall, Kansas State University,

Manhattan, Kansas 66506, United States; J.D. Butler, Colorado State University, Soil and Crop Sciences Department, Fort Collins, Colorado 80523, United States; Hayley R. Miller, Colorado State University, Soil and Crop Sciences Dept., Fort Collins, Colorado 80523, United States; Emily E. Heaton, Colorado State University, Soil and Crop Sciences Dept., Fort Collins, Colorado 80523, United States. Received 03/14/2008.

PI 653260. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "BILL BROWN"; CO01385-A1. CV-1025; PVP 200800327. Pedigree - Yumar/Arlin. Released 2007. Bill Brown is an awned, white-chaffed, medium maturing, semidwarf, hard red winter wheat. Bill Brown is susceptible to susceptible to stem rust (caused by *Puccinia graminis* Pers.:Pers f. sp. *tritici* Eriks. & E. Henn; races QFCS, QTHJ, RCRS, RKQQ, TPMK, TTTT, and TTKS), susceptible to leaf rust (caused by *Puccinia triticina* Eriks.; races MCRK, THBJ, MJBj, MHDS, KFBJ, TNRJ, MFPSC, and MLDSB) at the seedling stage, resistant to leaf rust at the adult plant stage, resistant (infection type 0) to race PST-116 and intermediate (infection type 5) to race PST-100 of stripe rust (*Puccinia striiformis* Westend.) at both the seedling and adult-plant stages, moderately susceptible to wheat streak mosaic virus, susceptible to barley yellow dwarf virus, susceptible to the Great Plains Biotype of Hessian fly [*Mayetiola destructor* (Say)], and susceptible to greenbug Biotype E [*Schizaphis graminum* (Rondani)]. Bill Brown is resistant to Russian wheat aphid Biotype 1 (*Diuraphis noxia* Kurdjumov) and susceptible to Russian wheat aphid Biotype 2. Bill Brown has acceptable values for milling-related traits (kernel weight, diameter, test weight, flour yield, wheat ash) and superior values for bread baking-related traits (wheat and flour protein concentration, mixograph mix time and tolerance, bake water absorption and mix time, pup loaf volume, and crumb grain).

The following were developed by Pioneer Hi-Bred International, Inc., Johnston, Iowa 50131, United States. Received 03/24/2008.

PI 653261 PVPO. *Glycine max* (L.) Merr.

Cultivar. "90Y40". PVP 200800107.

The following were collected by Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, 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 653262. *Rubus allegheniensis* Porter

Wild. Allegheny Blackberry, Common Blackberry; CRUB 1413. Collected 07/20/1991 in Pennsylvania, United States. Scotia Barrens, Half Moon Twnshp, 6mi West of State College. Pedigree - Collected from the wild in Pennsylvania. From North-facing slope. Arching floricanes, erect primo- canes to 2m. Fruit juicy and acidic.

The following were collected by J. Scott Cameron, Washington State University, Research & Extension Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States. Developed by Washington State University, SW

Washington Research Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States. Received 02/25/1992.

PI 653263. *Rubus geoides* Sm.

Breeding. 2 PAL 1B; CRUB 1571. Collected 02/1992 in Chile. Pedigree - Selected from the wild from Chile. Collection information is forthcoming.

PI 653264. *Rubus geoides* Sm.

Breeding. 2 JUN 1B; CRUB 1572. Collected 02/1992 in Chile. Pedigree - Selected from the wild from Chile. Collection information is forthcoming.

PI 653265. *Rubus armeniacus* Focke

Breeding. 2 OSR 1A; CRUB 1578. Collected 02/1992 in Chile. Pedigree - Selected from the wild from Chile. Collection information is forthcoming.

The following were collected by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Judith Young, Unknown; Gong Deshen, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; Shi Shengde, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; De Sheng Wei, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; Cheng Xiang Wang, Guizhou Botanical Garden, Guizhou Academy of Science, Liuchongguan, Guiyang, Guizhou 550001, China. Donated by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 07/21/1992.

PI 653266. *Rubus coreanus* Miq.

Wild. 92153; *R. coreanus*; CRUB 1632. Collected 06/07/1992 in Guizhou, China. Latitude 26° 23' N. Longitude 109° 9' E. Elevation 461 m. Dong Fang Forest Farm 25 km northeast of Liping Arboretum and Experimental plantings. Pedigree - Collected from the wild in China. Additional information is forthcoming.

PI 653267. *Rubus multibracteatus* H. Lev. & Vaniot

Wild. 92158; *R. multibracteatus*; CRUB 1641. Collected 06/16/1992 in Guizhou, China. Latitude 25° 53' N. Longitude 105° 39' E. Elevation 769 m. Drive 15 hours from Guiyang to Xingyi, Xingyi County travel was slow due to poor conditions of road from floods near Duan Qiao village, 10 km southeast of Guanling in Zheng Ning County. Growing out of a moist bank above road. Pedigree - Collected from the wild in China. Additional information is forthcoming.

PI 653268. *Rubus rosifolius* Sm.

Wild. 92121; *R. rosifolius*; CRUB 1666. Collected 06/03/1992 in Guizhou, China. Latitude 26° 4' N. Longitude 108° 42' E. Elevation 584 m. Drive 30 km northeast of Rongjiang to Zai Ma town. near Lu Si Zui village. The region is extensively cultivated or too steep for access so government official needed to help collect. Pedigree - Collected from the wild in China. Additional information is forthcoming.

PI 653269. *Rubus rosifolius* Sm.

Wild. 92149; *R. rosifolius*; CRUB 1667. Collected 06/07/1992 in Guizhou, China. Latitude 26° 8' N. Longitude 109° 5' E. Elevation 707 m. Shi Jin Shan Forest Farm about 20 km south west of Liping. extension reforestation several plants seen along trail. Pedigree - Collected from the wild in China. Additional information is forthcoming.

The following were donated by Nanjing Botanical Garden, Mem. Sun Yat-Sen, Nanjing, Jiangsu, China. Received 11/02/1992.

PI 653270. *Rubus multibracteatus* H. Lev. & Vaniot
Wild. CRUB 1716. Collected 10/03/1992 in Guizhou, China. Elevation 1350 m. Leishan County. Pedigree - Collected from the wild in China. Fruit red.

The following were donated by Laura Poggio, Ente Parco Nazionale Gran Paradiso, Giardino Botanico Alpino "Paradisia", Valnontey, Cogne, Valle d'Aosta 11012, Italy. Received 04/21/1995.

PI 653271. *Rubus idaeus* L.
Cultivated. 406; CRUB 1811. Collected in Italy. Pedigree - collected from the wild in Italy.

The following were collected by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Received 03/24/1995.

PI 653272. *Rubus bogotensis* Kunth
Wild. WM415; CRUB 1813. Collected 02/26/1995 in Bolivia. Pedigree - collected from the wild in Bolivia.

The following were donated by Hakan Schuberg, Gluntens Vag 9-807, Umea, Vasterbotten 903 31, Sweden. Received 11/04/1996.

PI 653273. *Rubus chamaemorus* L.
Wild. CRUB 1908. Collected in Sweden. Elevation 0 m. Somewhere in northern Sweden above 63 degrees north. Found on wet swamps without trees. Not on the poorest nor the richest swamps. It often grows together with Spagnum. Pedigree - collected from the wild in Sweden.

The following were collected by University of Oulu, Botanical Garden, Linnanmaa, Oulu, Oulu SF-90570, Finland. Donated by Kari Laine, University of Oulu, Botanical Gardens, Linnanmaa PO Box 400, Oulu, Oulu SF-90570, Finland. Received 1994.

PI 653274. *Rubus saxatilis* L.
Wild. *R. saxatilis*; 501; CRUB 1991. Collected 09/13/1993 in Lappi, Finland. Latitude 67° 23' N. Longitude 23° 31' E. Elevation 0 m. Kittilan Lappi, Kolari, Kalkkikkangas. Pedigree - Collected from the wild in Finland.

The following were donated by Rengong Meng, USDA-ARS-HCRL, 3420 NW Orchard Ave., Corvallis, Oregon 97330, United States. Received 11/16/1996.

PI 653275. *Rubus cockburnianus* Hemsl.
Uncertain. CRUB 2061; *R. cockburnianus*.

Unknown source. Received 11/16/1996.

PI 653276. *Rubus glaucus* Benth.

Wild. CRUB 2087. Collected in Ecuador. Pedigree - Collected from the wild in Ecuador.

Unknown source. Received 11/16/1996.

PI 653277. *Rubus glaucus* Benth.

Wild. CRUB 2096. Collected in Ecuador. Pedigree - Collected from the wild in Ecuador.

Unknown source. Received 10/12/2000.

PI 653278. *Rubus* sp.

Wild. CRUB 2131. Collected in Kazakhstan. Pedigree - Collected from the wild in Kazakhstan.

Unknown source. Received 08/31/2001.

PI 653279. *Rubus sachalinensis* H. Lev.

Wild. HVSC-025; CRUB 2145. Collected in Primorye, Russian Federation. Latitude 44° 41' 10" N. Longitude 135° 35' 30" E. Elevation 840 m. 12 km NE of Dalnegorsk, North Fork of the Krasnaya Rechka or Red River. At edges of clearings in forest soil texture was duff on clay; drainage was medium Associated vegetation: white birch forest, larches, *Fragaria orientalis*. Pedigree - Collected from the wild in Primorye, 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; 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 653280. *Rubus sachalinensis* H. Lev.

Wild. *R. idaeus* var. *aculeatissimus* J36; HD-2004-36; CRUB 2265. Collected 07/14/2004 in Hokkaido, Japan. Latitude 44° 18' 26" N. Longitude 142° 10' 58" E. Elevation 292 m. North Forest Research Laboratory (Tokuda 250, Nayoro), Shore of Lake Shumarinai, 2.5 km NE of the main building. On clay soil, open exposure to north east on slope 3 meters from edge of lake. Associated species: *Fragaria iinumae*, Hackweed, *Rhus*, butterfly weed and red clover. 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 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 653281. *Rubus pseudojaponicus* Koidz.

Wild. R. pseudojaponicus J39; HD-2004-39; CRUB 2267. 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. Edge of road, open light exposure. Heavy rocky brown clay with some duff. Associated species: bamboo, *Betula platyphylla*, big leaf (*Petasites giganteus*), plantain, Hackweed, Rhus and white clover. 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 Research 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 653282. *Rubus caesius* L.

Wild. GE-2004-104; CRUB 2305. Collected 10/04/2004 in Georgia. Pedigree - Collected from the wild in the Republic of Georgia.

Unknown source. Received 05/30/2006.

PI 653283. *Rubus trivialis* Michx.

Wild. CRUB 2337. Collected 05/23/2006 in Florida, United States.

The following were collected by Douglas Cook, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Alex Cook, 255 Irving Road, Eugene, Oregon 97404, United States. Donated by Douglas Cook, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/08/2006.

PI 653284. *Rubus pedatus* Sm.

Wild. DC2006-9; CRUB 2341. Collected 09/03/2006 in Oregon, United States.

The following were collected by HONDURAN FOUNDATION OF AGRICULTURAL RESEARCH - FHIA, Apartado Postal 2067, San Pedro Sula, Honduras. Received 01/03/2007.

PI 653285. *Rubus glaucus* Benth.

Wild. CRUB 2342. Collected 12/13/2006 in Honduras.

The following were donated by Maria Do Carmo Bassols Raseira, EMBRAPA/CPACT, Caixa Postal 403, Pelotas, Brazil. Received 03/22/2007.

PI 653286. *Rubus niveus* Thunb.

Cultivar. CRUB 2354.

The following were donated by Heron Breen, Fedco Seeds, P.O. Box 132, Saint Albans, Maine 04971, United States. Received 05/29/2007.

PI 653287. *Rubus hybrid*

Cultivar. "Bangor"; CRUB 2356. Pedigree - Selection from the wild in Newburgh, Maine.

Unknown source. Received 06/11/2007.

PI 653288. *Rubus argutus* Link

Wild. HDF-2007-001; *R. argutus* Whitefield Road; CRUB 2357. Collected 06/01/2007 in North Carolina, United States.

Unknown source. Received 06/11/2007.

PI 653289. *Rubus cuneifolius* Pursh

Wild. HDF-2007-009; *R. cuneifolius* introg. with *R. trivialis*; CRUB 2359. Collected 06/02/2007 in North Carolina, United States.

Unknown source. Received 06/11/2007.

PI 653290. *Rubus trivialis* Michx.

Wild. HDF-2007-010; *R. trivialis* Ideal Farm; CRUB 2360. Collected 06/02/2007 in North Carolina, United States.

Unknown source. Received 06/11/2007.

PI 653291. *Rubus argutus* Link

Wild. HDF-2007-015; *R. argutus* Lumberton; CRUB 2361. Collected 06/03/2007 in North Carolina, United States.

Unknown source. Received 06/11/2007.

PI 653292. *Rubus occidentalis* L.

Wild. HDF-2007-030; *R. occidentalis* HDF-2007-030; CRUB 2367. Collected 06/04/2007 in South Carolina, United States.

Unknown source. Received 06/11/2007.

PI 653293. *Rubus occidentalis* L.

Wild. HDF-2007-032; *R. occidentalis* HDF-2007-032; CRUB 2369. Collected 06/05/2007 in Georgia, United States.

Unknown source. Received 06/11/2007.

PI 653294. *Rubus occidentalis* L.

Wild. HDF-2007-035; *R. occidentalis* HDF-2007-035; CRUB 2371. Collected 06/05/2007 in Georgia, United States.

Unknown source. Received 06/11/2007.

PI 653295. *Rubus argutus* Link

Wild. HDF-2007-058; *R. argutus* Keener HDF-2007-058; CRUB 2377. Collected 06/08/2007 in Alabama, United States.

Unknown source. Received 06/11/2007.

PI 653296. *Rubus occidentalis* L.

Wild. HDF-2007-063; *R. occidentalis* HDF-2007-063; CRUB 2379. Collected 06/08/2007 in Alabama, United States.

Unknown source. Received 06/11/2007.

PI 653297. *Rubus argutus* Link

Wild. HDF-2007-070; *R. argutus* HD-2007-070; CRUB 2381. Collected 06/09/2007 in Mississippi, United States.

Unknown source. Received 06/11/2007.

PI 653298. *Rubus occidentalis* L.

Wild. HDF-2007-046; *R. occidentalis* HD-2007-046; CRUB 2382. Collected 06/06/2007 in Georgia, United States.

Unknown source. Received 07/15/2007.

PI 653299. *Rubus occidentalis* L.

Wild. HDF-2007-071; *R. occidentalis* HDF-2007-071; CRUB 2383. Collected 07/07/2007 in Kansas, United States.

Unknown source. Received 07/15/2007.

PI 653300. *Rubus occidentalis* L.

Wild. HDF-2007-073; *R. occidentalis* HDF-2007-073; CRUB 2385. Collected 07/07/2007 in Kansas, United States.

Unknown source. Received 07/15/2007.

PI 653301. *Rubus occidentalis* L.

Wild. HDF-2007-078; *R. occidentalis* HDF-2007-078; CRUB 2387. Collected 07/08/2007 in Kansas, United States.

Unknown source. Received 07/15/2007.

PI 653302. *Rubus occidentalis* L.

Wild. HDF-2007-081; *R. occidentalis* HDF-2007-081; CRUB 2388. Collected 07/08/2007 in Kansas, United States.

Unknown source. Received 07/15/2007.

PI 653303. *Rubus occidentalis* L.

Wild. HDF-2007-082; *R. occidentalis* HDF-2007-082; CRUB 2389. Collected 07/08/2007 in Kansas, United States.

Unknown source. Received 07/15/2007.

PI 653304. *Rubus occidentalis* L.

Wild. HDF-2007-085; *R. occidentalis* HDF-2007-085; CRUB 2392. Collected 07/09/2007 in Nebraska, United States.

Unknown source. Received 07/15/2007.

PI 653305. *Rubus occidentalis* L.

Wild. HDF-2007-088; *R. occidentalis* HDF-2007-088; CRUB 2394. Collected 07/09/2007 in Nebraska, United States.

Unknown source. Received 07/15/2007.

PI 653306. *Rubus occidentalis* L.

Wild. HDF-2007-090; *R. occidentalis* HDF-2007-090; CRUB 2395. Collected 07/09/2007 in Nebraska, United States.

Unknown source. Received 07/15/2007.

PI 653307. *Rubus occidentalis* L.

Wild. HDF-2007-091; *R. occidentalis* HDF-2007-091; CRUB 2396. Collected 07/09/2007 in Nebraska, United States.

Unknown source. Received 07/15/2007.

PI 653308. *Rubus occidentalis* L.

Wild. HDF-2007-092; *R. occidentalis* HDF-2007-092; CRUB 2397. Collected 07/09/2007 in Nebraska, United States.

Unknown source. Received 07/15/2007.

PI 653309. *Rubus occidentalis* L.

Wild. HDF-2007-094; *R. occidentalis* HDF-2007-094; CRUB 2398. Collected 07/09/2007 in Nebraska, United States.

Unknown source. Received 07/15/2007.

PI 653310. *Rubus occidentalis* L.

Wild. HDF-2007-096; *R. occidentalis* HDF-2007-096; CRUB 2399. Collected 07/10/2007 in Nebraska, United States.

Unknown source. Received 07/15/2007.

PI 653311. *Rubus occidentalis* L.

Wild. HDF-2007-100; *R. occidentalis* HDF-2007-100; CRUB 2400. Collected 07/10/2007 in Nebraska, United States.

Unknown source. Received 07/15/2007.

PI 653312. *Rubus idaeus* L.

Wild. HDF-2007-102; *R. idaeus* HDF-2007-102; CRUB 2402. Collected 07/10/2007 in South Dakota, United States.

Unknown source. Received 07/15/2007.

PI 653313. *Rubus idaeus* L.

Wild. HDF-2007-106; *R. idaeus* HDF-2007-106; CRUB 2403. Collected 07/11/2007 in South Dakota, United States.

Unknown source. Received 07/15/2007.

PI 653314. *Rubus occidentalis* L.

Wild. HDF-2007-108; *R. occidentalis* HDF-2007-108; CRUB 2405. Collected 07/12/2007 in South Dakota, United States.

Unknown source. Received 07/15/2007.

PI 653315. *Rubus occidentalis* L.

Wild. HDF-2007-110; *R. occidentalis* HDF-2007-110; CRUB 2406. Collected 07/12/2007 in South Dakota, United States.

Unknown source. Received 07/15/2007.

PI 653316. *Rubus occidentalis* L.

Wild. HDF-2007-111; *R. occidentalis* HDF-2007-111; CRUB 2407. Collected 07/12/2007 in South Dakota, United States.

Unknown source. Received 07/15/2007.

PI 653317. *Rubus occidentalis* L.

Wild. HDF-2007-113; *R. occidentalis* HDF-2007-113; CRUB 2409. Collected 07/12/2007 in South Dakota, United States.

Unknown source. Received 07/15/2007.

PI 653318. *Rubus occidentalis* L.

Wild. HDF-2007-115; *R. occidentalis* HDF-2007-115; CRUB 2410. Collected 07/12/2007 in South Dakota, United States.

Unknown source. Received 07/15/2007.

PI 653319. *Rubus occidentalis* L.

Wild. HDF-2007-117; *R. occidentalis* HDF-2007-117; CRUB 2412. Collected 07/13/2007 in South Dakota, United States.

Unknown source. Received 07/15/2007.

PI 653320. *Rubus idaeus* L.

Wild. HDF-2007-120; *R. idaeus* HDF-2007-120; CRUB 2413. Collected 07/13/2007 in South Dakota, United States.

Unknown source. Received 07/15/2007.

PI 653321. *Rubus occidentalis* L.

Wild. HDF-2007-123; *R. occidentalis* HDF-2007-123; CRUB 2415. Collected 07/13/2007 in Minnesota, United States.

Unknown source. Received 07/15/2007.

PI 653322. *Rubus idaeus* L.

Wild. HDF-2007-124; *R. idaeus* HDF-2007-124; CRUB 2416. Collected 07/14/2007 in Minnesota, United States.

Unknown source. Received 07/15/2007.

PI 653323. *Rubus occidentalis* L.

Wild. HDF-2007-125; *R. occidentalis* HDF-2007-125; CRUB 2417. Collected 07/14/2007 in Minnesota, United States.

Unknown source. Received 07/15/2007.

PI 653324. *Rubus occidentalis* L.

Wild. HDF-2007-126; *R. occidentalis* HDF-2007-126; CRUB 2418. Collected 07/14/2007 in Minnesota, United States.

Unknown source. Received 07/30/2007.

PI 653325. *Rubus occidentalis* L.

Wild. ORUS 3777; *R. occidentalis* New Brunswick ORUS 3777; 150; CRUB 2419. Collected 08/07/2006 in New Brunswick, Canada.

Unknown source. Received 07/30/2007.

PI 653326. *Rubus occidentalis* L.

Wild. ORUS 3778; 95; *R. occidentalis* Ontario ORUS 3778; CRUB 2420. Collected 07/07/2006 in Ontario, Canada.

Unknown source. Received 07/30/2007.

PI 653327. *Rubus occidentalis* L.

Wild. ORUS 3779; 110; *R. occidentalis* Connecticut ORUS 3779; CRUB 2421. Collected 07/10/2006 in Connecticut, United States.

Unknown source. Received 07/30/2007.

PI 653328. *Rubus occidentalis* L.

Wild. ORUS 3780; 151; *R. occidentalis* Iowa ORUS 3780; CRUB 2422. Collected 07/14/2006 in Iowa, United States.

Unknown source. Received 07/30/2007.

PI 653329. *Rubus occidentalis* L.

Wild. ORUS 3781; 155; *R. occidentalis* Illinois ORUS 3781; CRUB 2423. Collected 06/15/2006 in Illinois, United States.

Unknown source. Received 07/30/2007.

PI 653330. *Rubus occidentalis* L.

Wild. ORUS 3794; 88; *R. occidentalis* Indiana ORUS 3794; CRUB 2424. Collected 06/21/2006 in Indiana, United States.

Unknown source. Received 07/30/2007.

PI 653331. *Rubus occidentalis* L.

Wild. ORUS 3794; 90; *R. occidentalis* Indiana ORUS 3796; CRUB 2425. Collected 06/16/2006 in Indiana, United States.

Unknown source. Received 07/30/2007.

PI 653332. *Rubus occidentalis* L.

Wild. ORUS 3797; 91; *R. occidentalis* Indiana ORUS 3797; CRUB 2426.
Collected 06/16/2006 in Indiana, United States.

Unknown source. Received 07/30/2007.

PI 653333. *Rubus occidentalis* L.

Wild. ORUS 3798; 92; *R. occidentalis* Indiana ORUS 3798; CRUB 2427.
Collected 06/16/2006 in Indiana, United States.

Unknown source. Received 07/30/2007.

PI 653334. *Rubus occidentalis* L.

Wild. ORUS 3799; 93; *R. occidentalis* Indiana ORUS 3799; CRUB 2428.
Collected 06/16/2006 in Indiana, United States.

Unknown source. Received 07/30/2007.

PI 653335. *Rubus occidentalis* L.

Wild. ORUS 3800; 94; *R. occidentalis* Indiana ORUS 3800; CRUB 2429.
Collected 06/16/2006 in Indiana, United States.

Unknown source. Received 07/30/2007.

PI 653336. *Rubus occidentalis* L.

Wild. ORUS 3801; 139; *R. occidentalis* Indiana ORUS 3801; CRUB 2430.
Collected in Indiana, United States.

Unknown source. Received 07/30/2007.

PI 653337. *Rubus occidentalis* L.

Wild. ORUS 3803; 111; *R. occidentalis* Massachusetts ORUS 3803; CRUB 2432
. Collected 07/10/2006 in Massachusetts, United States.

Unknown source. Received 07/30/2007.

PI 653338. *Rubus occidentalis* L.

Wild. ORUS 3804; 112; *R. occidentalis* Massachusetts ORUS 3804; CRUB 2433
. Collected 07/10/2006 in Massachusetts, United States.

Unknown source. Received 07/30/2007.

PI 653339. *Rubus occidentalis* L.

Wild. ORUS 3805; 67; *R. occidentalis* Maryland ORUS 3805; CRUB 2434.
Collected 06/2006 in Maryland, United States.

Unknown source. Received 07/30/2007.

PI 653340. *Rubus occidentalis* L.

Wild. ORUS 3807; 69; *R. occidentalis* Maryland ORUS 3807; CRUB 2435.
Collected 06/2006 in Maryland, United States.

Unknown source. Received 07/30/2007.

PI 653341. *Rubus occidentalis* L.

Wild. ORUS 3808; 70; *R. occidentalis* Maryland ORUS 3808; CRUB 2436.
Collected 06/2006 in Maryland, United States.

Unknown source. Received 07/30/2007.

PI 653342. *Rubus occidentalis* L.

Wild. ORUS 3810; 72; *R. occidentalis* Maryland ORUS 3810; CRUB 2437.
Collected 06/2006 in Maryland, United States.

Unknown source. Received 07/30/2007.

PI 653343. *Rubus occidentalis* L.

Wild. ORUS 3811; 73; *R. occidentalis* Maryland ORUS 3811; CRUB 2438.
Collected 06/2006 in Maryland, United States.

Unknown source. Received 07/30/2007.

PI 653344. *Rubus occidentalis* L.

Wild. ORUS 3812; 74; *R. occidentalis* Maryland ORUS 3812; CRUB 2439.
Collected 06/2006 in Maryland, United States.

Unknown source. Received 07/30/2007.

PI 653345. *Rubus occidentalis* L.

Wild. ORUS 3814; 142; *R. occidentalis* Maine ORUS 3814; CRUB 2440.
Collected in Maine, United States.

Unknown source. Received 07/30/2007.

PI 653346. *Rubus occidentalis* L.

Wild. ORUS 3816; 144; *R. occidentalis* Maine ORUS 3816; CRUB 2442.
Collected in Maine, United States.

Unknown source. Received 07/30/2007.

PI 653347. *Rubus occidentalis* L.

Wild. ORUS 3817; 145; *R. occidentalis* Maine ORUS 3817; CRUB 2443.
Collected in Maine, United States.

Unknown source. Received 07/30/2007.

PI 653348. *Rubus occidentalis* L.

Wild. ORUS 3819; 147; *R. occidentalis* Maine ORUS 3819; CRUB 2444.
Collected in Maine, United States.

Unknown source. Received 07/30/2007.

PI 653349. *Rubus occidentalis* L.

Wild. ORUS 3820; 148; *R. occidentalis* Maine ORUS 3820; CRUB 2445.
Collected in Maine, United States.

Unknown source. Received 07/30/2007.

PI 653350. *Rubus occidentalis* L.

Wild. ORUS 3821; 149; *R. occidentalis* Maine ORUS 3821; CRUB 2446.
Collected in Maine, United States.

Unknown source. Received 07/30/2007.

PI 653351. *Rubus occidentalis* L.

Wild. ORUS 3823; 136; *R. occidentalis* Maine ORUS 3823; CRUB 2447.
Collected 07/11/2006 in Minnesota, United States.

Unknown source. Received 07/30/2007.

PI 653352. *Rubus occidentalis* L.

Wild. ORUS 3825; 130; *R. occidentalis* Minnesota ORUS 3825; CRUB 2449.
Collected in Minnesota, United States.

Unknown source. Received 07/30/2007.

PI 653353. *Rubus occidentalis* L.

Wild. ORUS 3826; 96; *R. occidentalis* Minnesota ORUS 3826; CRUB 2450.
Collected 07/02/2006 in Minnesota, United States.

Unknown source. Received 07/30/2007.

PI 653354. *Rubus occidentalis* L.

Wild. ORUS 3828; 98; *R. occidentalis* Minnesota ORUS 3828; CRUB 2452.
Collected 07/03/2007 in Minnesota, United States.

Unknown source. Received 07/30/2007.

PI 653355. *Rubus occidentalis* L.

Wild. ORUS 3829; 99; *R. occidentalis* Minnesota ORUS 3829; CRUB 2453.
Collected 07/03/2007 in Minnesota, United States.

Unknown source. Received 07/30/2007.

PI 653356. *Rubus occidentalis* L.

Wild. ORUS 3832; 3; *R. occidentalis* Missouri ORUS 3832; CRUB 2455.
Collected 06/11/2006 in Missouri, United States.

Unknown source. Received 07/30/2007.

PI 653357. *Rubus occidentalis* L.

Wild. ORUS 3835; 103; *R. occidentalis* North Carolina ORUS 3835; CRUB 2456. Collected 06/20/2006 in North Carolina, United States.

Unknown source. Received 07/30/2007.

PI 653358. *Rubus occidentalis* L.

Wild. ORUS 3837; 106; *R. occidentalis* North Carolina ORUS 3837; CRUB 2457. Collected 07/23/2006 in North Carolina, United States.

Unknown source. Received 07/30/2007.

PI 653359. *Rubus occidentalis* L.

Wild. ORUS 3838; 107; *R. occidentalis* North Carolina ORUS 3838; CRUB 2458. Collected 07/23/2006 in North Carolina, United States.

Unknown source. Received 07/30/2007.

PI 653360. *Rubus occidentalis* L.

Wild. ORUS 3839; 152; *R. occidentalis* New York ORUS 3839; CRUB 2459.
Collected 07/15/2006 in New York, United States.

Unknown source. Received 07/30/2007.

PI 653361. *Rubus occidentalis* L.

Wild. 154; 153; ORUS 3840; ORUS 3841; CRUB 2460; *R. occidentalis* New York ORUS 3840. Collected 07/15/2006 in New York, United States.

Unknown source. Received 07/30/2007.

PI 653362. *Rubus occidentalis* L.

Wild. ORUS 3842; 109; *R. occidentalis* New York ORUS 3842; CRUB 2461.
Collected 07/09/2006 in New York, United States.

Unknown source. Received 07/30/2007.

PI 653363. *Rubus occidentalis* L.

Wild. ORUS 3843; 113; *R. occidentalis* New York ORUS 3843; CRUB 2462.
Collected 07/10/2006 in New York, United States.

Unknown source. Received 07/30/2007.

PI 653364. *Rubus occidentalis* L.

Wild. ORUS 3844; 132; *R. occidentalis* New York ORUS 3844; CRUB 2463.
Collected 07/10/2006 in New York, United States.

Unknown source. Received 07/30/2007.

PI 653365. *Rubus occidentalis* L.

Wild. ORUS 3845; 33; *R. occidentalis* New York ORUS 3845; CRUB 2464.
Collected 07/10/2006 in New York, United States.

Unknown source. Received 07/30/2007.

PI 653366. *Rubus occidentalis* L.

Wild. ORUS 3846; 134; *R. occidentalis* New York ORUS 3846; CRUB 2465.
Collected 07/10/2006 in New York, United States.

Unknown source. Received 07/30/2007.

PI 653367. *Rubus occidentalis* L.

Wild. ORUS 3848; 131; *R. occidentalis* New York ORUS 3848; CRUB 2466.
Collected 07/10/2006 in New York, United States.

Unknown source. Received 07/30/2007.

PI 653368. *Rubus occidentalis* L.

Wild. ORUS 3849; 86; *R. occidentalis* Ohio ORUS 3849; CRUB 2467.
Collected 06/19/2006 in Ohio, United States.

Unknown source. Received 07/30/2007.

PI 653369. *Rubus occidentalis* L.

Wild. ORUS 3851; 122; *R. occidentalis* Pennsylvania ORUS 3851; CRUB 2468.
Collected 07/11/2006 in Pennsylvania, United States.

Unknown source. Received 07/30/2007.

PI 653370. *Rubus occidentalis* L.

Wild. ORUS 3852; 127; *R. occidentalis* Pennsylvania ORUS 3852; CRUB 2469.
Collected in Pennsylvania, United States.

Unknown source. Received 07/30/2007.

PI 653371. *Rubus occidentalis* L.

Wild. 128; ORUS 3853; *R. occidentalis* Pennsylvania ORUS 3853; CRUB 2470.
Collected in Pennsylvania, United States.

Unknown source. Received 07/30/2007.

PI 653372. *Rubus occidentalis* L.

Wild. ORUS 3854; 125; 124; ORUS 3855; CRUB 2471; *R. occidentalis* Pennsylvania ORUS 3854. Collected 06/29/2006 in Pennsylvania, United States.

Unknown source. Received 07/30/2007.

PI 653373. *Rubus occidentalis* L.

Wild. ORUS 3856; 126; *R. occidentalis* Pennsylvania ORUS 3856; CRUB 2472. Collected 06/24/2006 in Pennsylvania, United States.

Unknown source. Received 07/30/2007.

PI 653374. *Rubus occidentalis* L.

Wild. Site #01 Plant #03; Site #01 Plant #01; ORUS 3857; 9; ORUS 3858; 8; CRUB 2473; *R. occidentalis* Tennessee ORUS 3857. Collected 06/06/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653375. *Rubus occidentalis* L.

Wild. CRUB 2474. Collected 06/09/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653376. *Rubus occidentalis* L.

Wild. Site #03 Plant #02; Site #03 Plant #01; ORUS 3865; ORUS 3864; 16; 15; CRUB 2475; *R. occidentalis* Tennessee ORUS 3864. Collected 06/11/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653377. *Rubus occidentalis* L.

Wild. Site #04 Plant #02; Site #04 Plant #01; ORUS 3866; 18; 17; ORUS 3867; CRUB 2476; *R. occidentalis* Tennessee ORUS 3866. Collected 06/09/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653378. *Rubus occidentalis* L.

Wild. Site #05 Plant #02; Site #05 Plant #01; Site #05 Plant #03; ORUS 3868; 21; ORUS 3869; ORUS 3870; 20; 19; *R. occidentalis* Tennessee ORUS 3868; CRUB 2477. Collected 06/09/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653379. *Rubus occidentalis* L.

Wild. Site #06 Plant #01; ORUS 3871; 22; CRUB 2478; *R. occidentalis*
Tennessee ORUS 3871. Collected 06/09/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653380. *Rubus occidentalis* L.

Wild. CRUB 2479. Collected 06/09/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653381. *Rubus occidentalis* L.

Wild. CRUB 2480. Collected 06/09/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653382. *Rubus occidentalis* L.

Wild. Site #09 Plant #01; 34; ORUS 3883; CRUB 2481; *R. occidentalis*
Tennessee ORUS 3883. Collected 06/09/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653383. *Rubus occidentalis* L.

Wild. CRUB 2482. Collected 06/09/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653384. *Rubus occidentalis* L.

Wild. CRUB 2483. Collected 06/09/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653385. *Rubus occidentalis* L.

Wild. CRUB 2484. Collected 06/09/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653386. *Rubus occidentalis* L.

Wild. CRUB 2485. Collected 06/09/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653387. *Rubus occidentalis* L.

Wild. Site #14 Plant #02; Site #14 Plant #01; ORUS 3900; 51; 52; ORUS
3901; CRUB 2486; *R. occidentalis* Tennessee ORUS 3900. Collected
06/09/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653388. *Rubus occidentalis* L.

Wild. Site #15 Plant #02; Site #15 Plant #01; ORUS 3902; 54; 53; ORUS 3903; CRUB 2487; *R. occidentalis* Tennessee ORUS 3902. Collected 06/09/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653389. *Rubus occidentalis* L.

Wild. Site #16 Plant #01; Site #16 Plant #02; ORUS 3904; 56; ORUS 3905; 55; CRUB 2488; *R. occidentalis* Tennessee ORUS 3904. Collected 06/10/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653390. *Rubus occidentalis* L.

Wild. Site #17 Plant #01; Site #17 Plant #02; ORUS 3906; 57; 58; ORUS 3907; CRUB 2489; *R. occidentalis* Tennessee ORUS 3906. Collected 06/10/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653391. *Rubus occidentalis* L.

Wild. Site #18 Plant #01; 59; ORUS 3908; CRUB 2490; *R. occidentalis* Tennessee ORUS 3908. Collected 06/10/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653392. *Rubus occidentalis* L.

Wild. Site #19 Plant #01; Site #19 Plant #02; 61; ORUS 3910; 60; *R. occidentalis* Tennessee ORUS 3909; CRUB 2491. Collected 06/10/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653393. *Rubus occidentalis* L.

Wild. Site #20 Plant #01; 62; ORUS 3911; CRUB 2492; *R. occidentalis* Tennessee ORUS 3911. Collected 06/10/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653394. *Rubus occidentalis* L.

Wild. Site #21 Plant #01; Site #21 Plant #02; ORUS 3913; 63; 64; *R. occidentalis* Tennessee ORUS 3912; CRUB 2493. Collected 06/10/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653395. *Rubus occidentalis* L.

Wild. Site #22 Plant #02; Site #22 Plant #01; 66; ORUS 3915; 65; R. occidentalis Tennessee ORUS 3914; CRUB 2494. Collected 06/14/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653396. *Rubus occidentalis* L.

Wild. ORUS 3916; 100; R. occidentalis Tennessee ORUS 3916; CRUB 2495. Collected 06/20/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653397. *Rubus occidentalis* L.

Wild. 102; ORUS 3918; R. occidentalis Tennessee ORUS 3918; CRUB 2496. Collected 06/20/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653398. *Rubus occidentalis* L.

Wild. 105; ORUS 3919; R. occidentalis Tennessee ORUS 3919; CRUB 2497. Collected 06/20/2006 in Tennessee, United States.

Unknown source. Received 07/30/2007.

PI 653399. *Rubus occidentalis* L.

Wild. 119; ORUS 3928; ORUS 3926; 120; 121; ORUS 3927; CRUB 2498; R. occidentalis Wisconsin ORUS 3926. Collected 07/05/2006 in Wisconsin, United States.

Unknown source. Received 07/30/2007.

PI 653400. *Rubus occidentalis* L.

Wild. ORUS 3929; 4; R. occidentalis West Virginia ORUS 3929; CRUB 2499. Collected 06/17/2006 in West Virginia, United States.

Unknown source. Received 07/30/2007.

PI 653401. *Rubus occidentalis* L.

Wild. ORUS 3930; 5; R. occidentalis West Virginia ORUS 3930; CRUB 2500. Collected 06/21/2006 in West Virginia, United States.

Unknown source. Received 07/30/2007.

PI 653402. *Rubus occidentalis* L.

Wild. ORUS 3931; 140; R. occidentalis West Virginia ORUS 3931; CRUB 2501. Collected in West Virginia, United States.

The following were collected by Michael P. Dossett, Oregon State University, Horticulture, 4017 Agriculture and Life Science Building, Corvallis, Oregon 97331-7304, United States. Received 02/01/2008.

PI 653403. *Rubus hybrid*

Wild. *R. leucodermis* x *R. strigosus* Washington; CRUB 2503. Collected 08/31/2007 in Washington, United States.

PI 653404. *Rubus leucodermis* Douglas ex Torr. & A. Gray

Wild. *R. leucodermis* Washington; CRUB 2504. Collected 08/31/2007 in Washington, United States.

PI 653405. *Rubus leucodermis* Douglas ex Torr. & A. Gray

Wild. *R. leucodermis* Washington; CRUB 2505. Collected 09/01/2007 in Washington, United States.

PI 653406. *Rubus strigosus* Michx.

Wild. *R. strigosus* Washington; CRUB 2506. Collected 09/02/2007 in Washington, United States.

PI 653407. *Rubus leucodermis* Douglas ex Torr. & A. Gray

Wild. *R. leucodermis* Washington; CRUB 2507. Collected 09/03/2007 in Washington, United States.

PI 653408. *Rubus leucodermis* Douglas ex Torr. & A. Gray

Wild. *R. leucodermis* Oregon; CRUB 2508. Collected 08/09/2007 in Oregon, United States.

The following were collected by Michael C. Russell, Oregon State University, Department of Horticulture, 4017 Agriculture and Life Science Building, Corvallis, Oregon 97331-7304, United States. Donated by Michael P. Dossett, Oregon State University, Horticulture, 4017 Agriculture and Life Science Building, Corvallis, Oregon 97331-7304, United States. Received 02/01/2008.

PI 653409. *Rubus leucodermis* Douglas ex Torr. & A. Gray

Wild. *R. leucodermis* Oregon; CRUB 2509. Collected 07/2007 in Oregon, United States.

Unknown source. Received 01/14/1982.

PI 653410. *Fagopyrum esculentum* Moench

Cifa 40.

The following were developed by D. M. Broadhead, U.S. Sugar Crops Field Station, Rt. 13 Box 14, Meridan, Mississippi 39301, United States. Received 1983.

PI 653411. *Sorghum bicolor* (L.) Moench *subsp. bicolor*

"M 81E"; MER. 71-1; NSL 174431. CV-121. Pedigree - Selected from F2 progeny of cross Brawley x (Brawley x Rio). Info. from Crop Sci. 23(5):1013 (1983) -- developed for syrup & fermentation production. Panicle erect & semi- compact. Pubescence on black glumes semideciduous. Indurate glumes have sharp apex & cover 1/4 caryopsis. Seed midsized.

Brown. Elliptic. Enclosed awnless lemmas. White pericarp. Endosperm normal. Nonwaxy. Necrotic plant color purple. Culms juicy. Brown testa. Endosperm starchy. Green coleoptile. Resistance leaf anthracnose, stalk red rot & downy mildew. Susceptible maize dwarf virus (MDMV) & rust. Late maturing. Cultivated.

The following were donated by David R. Gealy, USDA-ARS, Dale Bumpers National Rice Res. Ctr., 2890 Hwy 130 East, Stuttgart, Arkansas 72160, United States. Received 03/28/2008.

PI 653412. *Oryza sativa* L.

Wild. AR-1994-5A; NSGC 18867. Collected 08/30/1994 in Arkansas, United States. Latitude 34° 50' 27" N. Longitude 91° 32' 35" W. Prairie county. WEEDY RED RICE. Cold sensitive.

PI 653413. *Oryza sativa* L.

Wild. AR-1994-10A; NSGC 18868. Collected 08/30/1994 in Arkansas, United States. Latitude 34° 50' 27" N. Longitude 91° 32' 35" W. Prairie county. WEEDY RED RICE. Moderately cold tolerant.

PI 653414. *Oryza sativa* L.

Wild. AR-1994-16B; NSGC 18869. Collected 08/31/1994 in Arkansas, United States. Latitude 34° 50' 27" N. Longitude 91° 32' 35" W. Prairie county. WEEDY RED RICE. Moderately cold tolerant.

PI 653415. *Oryza sativa* L.

Wild. AR-1994-18A; NSGC 18870. Collected 09/02/1994 in Arkansas, United States. Latitude 34° 28' 50" N. Longitude 91° 32' 30" W. Stuttgart. WEEDY RED RICE. High dormancy when freshly harvested.

The following were collected by Mississippi Agric. & Forestry Exp. Sta., Mississippi State University, Mississippi, United States. Donated by David R. Gealy, USDA-ARS, Dale Bumpers National Rice Res. Ctr., 2890 Hwy 130 East, Stuttgart, Arkansas 72160, United States. Received 03/28/2008.

PI 653416. *Oryza sativa* L.

Wild. MS-1995-15; NSGC 18871. Collected 1995 in Mississippi, United States. Latitude 33° 36' 6" N. Longitude 90° 46' 25" W. Shaw. WEEDY RED RICE.

The following were donated by David R. Gealy, USDA-ARS, Dale Bumpers National Rice Res. Ctr., 2890 Hwy 130 East, Stuttgart, Arkansas 72160, United States. Received 03/28/2008.

PI 653417. *Oryza sativa* L.

Wild. AR-1994-11D; NSGC 18872. Collected 08/31/1994 in Arkansas, United States. Latitude 34° 50' 27" N. Longitude 91° 32' 35" W. Prairie county. WEEDY RED RICE.

The following were collected by Mississippi Agric. & Forestry Exp. Sta., Mississippi State University, Mississippi, United States. Donated by David R. Gealy, USDA-ARS, Dale Bumpers National Rice Res. Ctr., 2890 Hwy 130 East, Stuttgart, Arkansas 72160, United States. Received 03/28/2008.

PI 653418. *Oryza sativa* L.

Wild. MS-1996-5; NSGC 18873. Collected 1996 in Mississippi, United States. WEEDY RED RICE.

PI 653419. *Oryza sativa* L.

Wild. MS-1996-9; NSGC 18874. Collected 1996 in Mississippi, United States. WEEDY RED RICE.

The following were collected by Louisiana Agricultural Experiment Station, Baton Rouge, Louisiana, United States. Donated by David R. Gealy, USDA-ARS, Dale Bumpers National Rice Res. Ctr., 2890 Hwy 130 East, Stuttgart, Arkansas 72160, United States. Received 03/28/2008.

PI 653420. *Oryza sativa* L.

Wild. LA-1995-LA3; NSGC 18875. Collected 1995 in Louisiana, United States. Latitude 30° 12' 51" N. Longitude 92° 22' 28" W. Crowley. WEEDY RED RICE.

The following were collected by Mississippi Agric. & Forestry Exp. Sta., Mississippi State University, Mississippi, United States. Donated by David R. Gealy, USDA-ARS, Dale Bumpers National Rice Res. Ctr., 2890 Hwy 130 East, Stuttgart, Arkansas 72160, United States. Received 03/28/2008.

PI 653421. *Oryza sativa* L.

Wild. MS-1995-MS4; NSGC 18876. Collected 1995 in Mississippi, United States. WEEDY RED RICE.

The following were donated by David R. Gealy, USDA-ARS, Dale Bumpers National Rice Res. Ctr., 2890 Hwy 130 East, Stuttgart, Arkansas 72160, United States. Received 03/28/2008.

PI 653422. *Oryza sativa* L.

Wild. AR-1995-StgB; NSGC 18877. Collected 1995 in Arkansas, United States. Latitude 34° 28' 50" N. Longitude 91° 32' 30" W. Stuttgart. WEEDY RED RICE.

PI 653423. *Oryza sativa* L.

Wild. AR-1995-StgS; NSGC 18878. Collected 1995 in Arkansas, United States. Latitude 34° 28' 50" N. Longitude 91° 32' 30" W. Stuttgart. WEEDY RED RICE.

The following were collected by Texas Agricultural Experiment Station, Texas, United States. Donated by David R. Gealy, USDA-ARS, Dale Bumpers National Rice Res. Ctr., 2890 Hwy 130 East, Stuttgart, Arkansas 72160, United States. Received 03/28/2008.

PI 653424. *Oryza sativa* L.

Wild. TX-1995-TX4; NSGC 18879. Collected 1995 in Texas, United States. Latitude 29° 47' 28" N. Longitude 95° 49' 37" W. Katy. WEEDY RED RICE.

The following were donated by David R. Gealy, USDA-ARS, Dale Bumpers National Rice Res. Ctr., 2890 Hwy 130 East, Stuttgart, Arkansas 72160, United States. Received 03/28/2008.

PI 653425. *Oryza sativa* L.

Wild. AR-1994-8; NSGC 18880. Collected 08/30/1994 in Arkansas, United States. Latitude 34° 50' 27" N. Longitude 91° 32' 35" W. Prairie county. WEEDY RED RICE.

PI 653426. *Oryza sativa* L.

Wild. MO-2000-1004-01; NSGC 18881. Collected 2000 in Missouri, United States. Latitude 36° 12' 1" N. Longitude 90° 2' 36" W. Dunklin county. WEEDY RED RICE.

PI 653427. *Oryza sativa* L.

Wild. AR-2000-1025-01; NSGC 18882. Collected 2000 in Arkansas, United States. Latitude 36° 22' 21" N. Longitude 90° 24' 3" W. Clay county. WEEDY RED RICE.

PI 653428. *Oryza sativa* L.

Wild. AR-2000-1081-01; NSGC 18883. Collected 2000 in Arkansas, United States. Latitude 34° 58' 6" N. Longitude 92° 53' 23" W. Perry county. WEEDY RED RICE.

PI 653429. *Oryza sativa* L.

Wild. AR-2000-1091-01; NSGC 18884. Collected 2000 in Arkansas, United States. Latitude 35° 35' 15" N. Longitude 90° 39' 22" W. Poinsett county. WEEDY RED RICE.

PI 653430. *Oryza sativa* L.

Wild. AR-2000-1096-01; NSGC 18885. Collected 2000 in Arkansas, United States. Latitude 34° 18' 40" N. Longitude 91° 22' 15" W. Arkansas county. WEEDY RED RICE.

PI 653431. *Oryza sativa* L.

Wild. AR-2000-1196-01; NSGC 18886. Collected 2000 in Arkansas, United States. Latitude 35° 15' 20" N. Longitude 90° 19' 50" W. Crittenden county. WEEDY RED RICE.

PI 653432. *Oryza sativa* L.

Wild. MO-2000-1098-01; NSGC 18887. Collected 2000 in Missouri, United States. Latitude 37° 16' 44" N. Longitude 90° 1' 50" W. Bollinger county. WEEDY RED RICE.

PI 653433. *Oryza sativa* L.

Wild. AR-2000-1118-01; NSGC 18888. Collected 2000 in Arkansas, United States. Latitude 34° 50' 27" N. Longitude 91° 32' 35" W. Prairie county. WEEDY RED RICE.

PI 653434. *Oryza sativa* L.

Wild. AR-2000-1134-01; NSGC 18889. Collected 2000 in Arkansas, United States. Latitude 34° 46' 14" N. Longitude 90° 47' 1" W. Lee county. WEEDY RED RICE.

PI 653435. *Oryza sativa* L.

Wild. AR-2000-1135-01; NSGC 18890. Collected 2000 in Arkansas, United States. Latitude 33° 48' 2" N. Longitude 91° 16' 8" W. Desha county. WEEDY RED RICE.

PI 653436. *Oryza sativa* L.

Wild. AR-2000-1141-01; NSGC 18891. Collected 2000 in Arkansas, United States. Latitude 36° 2' 26" N. Longitude 91° 6' 33" W. Lawrence county. WEEDY RED RICE.

PI 653437. *Oryza sativa* L.

Wild. LA-2000-1160-01; NSGC 18892. Collected 2000 in Louisiana, United States. Latitude 32° 50' 12" N. Longitude 91° 47' 32" W. Morehouse parish. WEEDY RED RICE.

PI 653438. *Oryza sativa* L.

Wild. MS-2000-1179-01; NSGC 18893. Collected 2000 in Mississippi, United States. Latitude 34° 14' 50" N. Longitude 90° 34' 23" W. Coahoma county. WEEDY RED RICE.

PI 653439. *Oryza sativa* L.

Wild. LA-2000-1188-01; NSGC 18894. Collected 2000 in Louisiana, United States. Latitude 32° 43' 42" N. Longitude 91° 14' 36" W. East Carroll parish. WEEDY RED RICE.

The following were donated by Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653440. *Glycine soja* Siebold & Zucc.

Wild. 1411; IL 0599; SY 707034. Collected in Luzon, Philippines.

The following were collected by N.H. Scarlett. Donated by Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States; N.H. Scarlett. Received 11/27/2007.

PI 653441. *Glycine clandestina* J. C. Wendl.

Wild. NHS 82-64; IL 0660; SY 707046. Collected 02/05/1982 in Victoria, Australia. Latitude 37° 2' S. Longitude 147° 18' E. Elevation 1360 m. Red Bank Plain, 28 km northeast of Omeo. Omeo-Bogeng Road. *Eucalyptus pauciflora* woodland on red brown clay loam (shallow), formed on basalt.

The following were donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653442. *Glycine tomentella* Hayata

Wild. BGCH 323; IL 0940; G 1933; CANB 354419; SY 707079. Collected 06/26/1984 in Western Australia, Australia. Latitude 16° 17' S. Longitude 127° 2' E. Elevation 320 m. On east side of Dawn Creek.

PI 653443. *Glycine tomentella* Hayata

Wild. BGCH 326; IL 0941; G 1936; CANB 354433; SY 707080. Collected 06/26/1984 in Western Australia, Australia. Latitude 15° 42' S. Longitude 126° 22' E. Elevation 360 m. South bank of Drysdale River.

The following were collected by William J. Kenworthy, University of Maryland, Department of Agronomy, H.J. Patterson Hall, College Park, Maryland 20742, United States; A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; M.J. Doyle, CSIRO, Canberra, Austr. Capital Terr., Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653444. *Glycine clandestina* J. C. Wendl.

Wild. GBDK 631/4.5; IL 0956; G 2143; SY 707082. Collected 08/10/1985 in Queensland, Australia. Latitude 25° 50' S. Longitude 149° 2' E. Elevation 390 m. Commission Creek, 102.5 km west of Taroom.

PI 653445. *Glycine clandestina* J. C. Wendl.

Wild. GBDK 642/146; IL 0961; G 2148; CANB 374136; 0227; SY 707083. Collected 08/11/1985 in Queensland, Australia. Latitude 25° 3' S. Longitude 148° 12' E. Elevation 420 m. Carnarvon Gorge, path to amphitheatre.

PI 653446. *Glycine clandestina* J. C. Wendl.

Wild. GBDK 644/5,6; IL 0962; G 2149; SY 707084. Collected 08/12/1985 in Queensland, Australia. Latitude 25° 35' S. Longitude 148° 42' E. Elevation 450 m. Baffle Creek, 32 km north of Injune.

PI 653447. *Glycine clandestina* J. C. Wendl.

Wild. GBDK 808/156; IL 0973; G 2160; 0242; SY 707085. Collected 08/19/1985 in Queensland, Australia. Latitude 26° 39' S. Longitude 149° 59' E. Elevation 320 m. Drillham Creek, Drillham, 20 km west of Miles.

PI 653448. *Glycine clandestina* J. C. Wendl.

Wild. GBDK 818/2; IL 0976; G 2163; SY 707086. Collected 08/20/1985 in Queensland, Australia. Latitude 26° 50' S. Longitude 151° 45' E. Elevation 567 m. Middle Creek, 3.2 km west of Maidenwell.

PI 653449. *Glycine clandestina* J. C. Wendl.

Wild. GBDK 821/4,5; IL 0979; G 2166; 0244; SY 707088. Collected 08/20/1985 in Queensland, Australia. Latitude 26° 45' S. Longitude 151° 36' E. Elevation 566 m. Alice Creek, 9.8 km southwest of Kumbia

PI 653450. *Glycine clandestina* J. C. Wendl.

Wild. GBDK 829/7-9; IL 0982; G 2169; SY 707089. Collected 08/21/1985 in Queensland, Australia. Latitude 26° 8' S. Longitude 152° 32' E. Elevation 80 m. Point Pure Lookout, Brooyar Forest Drive, 5.4 km from entrance.

PI 653451. *Glycine clandestina* J. C. Wendl.

Wild. GBDK 832/1-3; IL 0984; G 2171; SY 707090. Collected 08/21/1985 in Queensland, Australia. Latitude 26° 29' S. Longitude 152° 56' E. Elevation 83 m. Eumundi, 48.7 km southeast of Gympie.

The following were collected by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653452. *Glycine clandestina* J. C. Wendl.

Wild. GB 845/1,2; IL 0988; G 2175; SY 707091. Collected 08/24/1985 in Queensland, Australia. Latitude 28° 10' S. Longitude 151° 45' E. Elevation 500 m. Greymare, 31.8 km west of Warwick.

The following were collected by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grant, CSIRO, Canberra, Austr. Capital Terr., Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653453. *Glycine rubiginosa* Tindale & B. E. Pfeil

Wild. GBG 909; IL 0995; G 2362; CANB 374045; SY 707092. Collected 10/25/1985 in South Australia, Australia. Latitude 32° 5' S. Longitude 138° 17' E. Elevation 260 m. Death Rock, Kanyaka Ruins, 28 kilometers southwest of Hawker, 2.8 km from road.

PI 653454. *Glycine rubiginosa* Tindale & B. E. Pfeil

Wild. GBG 910; IL 0996; G 2363; CANB 374047; SY 707093. Collected 10/25/1985 in South Australia, Australia. Latitude 31° 40' S. Longitude 138° 36' E. Elevation 400 m. Ulowdna Creek, 32.4 kilometers northeast of Hawker toward Wilpena Pound.

PI 653455. *Glycine clandestina* J. C. Wendl.

Wild. GBG 923; IL 1008; G 2375; SY 707094. Collected 10/28/1985 in South Australia, Australia. Latitude 31° 6' S. Longitude 138° 38' E. Elevation 500 m. Angorichina Village, 10.5 km east of Blinman.

PI 653456. *Glycine clandestina* J. C. Wendl.

Wild. GBG 931; IL 1016; G 2383; CANB 374061; SY 707095. Collected 10/29/1985 in South Australia, Australia. Latitude 33° 42' S. Longitude 136° 45' E. Elevation 410 m. Narridy Creek, 17.6 km of Cowell.

PI 653457. *Glycine rubiginosa* Tindale & B. E. Pfeil

Wild. GBG 938; IL 1021; G 2388; SY 707096. Collected 10/31/1985 in South Australia, Australia. Latitude 32° 50' S. Longitude 138° 3' E. Elevation 180 m. Mambray Creek, 54 km southeast of Port Augusta.

PI 653458. *Glycine clandestina* J. C. Wendl.

Wild. GBG 942; IL 1025; G 2392; SY 707097. Collected 10/31/1985 in South Australia, Australia. Latitude 34° 10' S. Longitude 138° 33' E. Elevation 150 m. Wakefield River, 15.7 km east of Balaklava.

PI 653459. *Glycine rubiginosa* Tindale & B. E. Pfeil

Wild. GBG 945; IL 1026; G 2393; CANB 374072; SY 707098. Collected 11/02/1985 in South Australia, Australia. Latitude 35° 30' S. Longitude 138° 26' E. Elevation 20 m. 2.4 km west of Goolwa, growing on old golf course.

The following were collected by William J. Kenworthy, University of Maryland, Department of Agronomy, H.J. Patterson Hall, College Park, Maryland 20742, United States; A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; M.J. Doyle, CSIRO, Canberra, Austr. Capital Terr., Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653460. *Glycine falcata* Benth.

Wild. GBDK 658; IL 1037; G 2081; SY 707099. Collected 08/13/1985 in Queensland, Australia. Latitude 23° 58' S. Longitude 148° 7' E. Elevation 250 m. Minerva, 17.4 km north of Springsure.

The following were collected by William J. Kenworthy, University of Maryland, Department of Agronomy, H.J. Patterson Hall, College Park, Maryland 20742, United States; A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; M.J. Doyle, CSIRO, Canberra, Austr. Capital Terr., Australia. Donated by Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653461. *Glycine falcata* Benth.

Wild. CANB 374147; IL 1039; G 2085; SY 707100. Collected 08/14/1985 in Queensland, Australia.

The following were collected by William J. Kenworthy, University of Maryland, Department of Agronomy, H.J. Patterson Hall, College Park, Maryland 20742, United States; A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; M.J. Doyle, CSIRO, Canberra, Austr. Capital Terr., Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653462. *Glycine falcata* Benth.

Wild. GBDK 684; 0239; IL 1042; CANB 374154; G 2088; SY 707101. Collected 08/16/1985 in Queensland, Australia. Latitude 23° 32' S. Longitude 145° 10' E. Elevation 285 m. Westbourne, 10.1 km west of Barcaldine.

PI 653463. *Glycine latifolia* (Benth.) C. A. Newell & Hymowitz

Wild. GBDK 630/3-6; IL 1044; G 2110; SY 707102. Collected 08/10/1985 in Queensland, Australia. Latitude 25° 41' S. Longitude 149° 13' E. Elevation 300 m. Dawson River, 76.6 km west of Taroom.

The following were collected by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grant, CSIRO, Canberra, Austr. Capital Terr., Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653464. *Glycine latrobeana* (Meisn.) Benth.

Wild. GBG 943; IL 1068; G 2356; SY 707104. Collected 11/01/1985 in South Australia, Australia. Latitude 34° 53' S. Longitude 138° 53' E. Elevation 500 m. Lobethal, 2 km north of Lobethal Post Office.

The following were collected by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653465. *Glycine tabacina* (Labill.) Benth.

Wild. GB 845/4; IL 1184; G 2293; SY 707105. Collected 08/24/1985 in Queensland, Australia. Latitude 28° 10' S. Longitude 151° 45' E. Elevation 500 m. Greymare, 31.8 km west of Warwick.

The following were collected by L. Craven, CSIRO, Division of Plant Industry, General Post Office Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Jewel M. Stewart, 7505 CR 129, Tyler, Texas 75703, United States; Paul A. Fryxell, University of Texas, Dept. of Botany, Austin, Texas 78713, United States. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653466. *Glycine tomentella* Hayata

Wild. IL 1234; G 2058; SY 707106. Collected 05/01/1985 in Western Australia, Australia. Latitude 15° 21' S. Longitude 124° 32' E. Elevation 50 m. Augustus Island, Camden Sound.

The following were collected by I.B. Staples, Department of Primary Industry, Marceba, Queensland, Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653467. *Glycine tomentella* Hayata

Wild. IBS2471; CANB 335734; G 1419; IL 1238; SY 707107. Collected 06/03/1979 in Queensland, Australia. Latitude 17° 8' S. Longitude 144° 28' E. Elevation 360 m. Burke Development Road, 7.4 km west Northwest of Chillogoe, on Stockyard Creek.

The following were collected by R. Purdie. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653468. *Glycine canescens* F. J. Herm.

Wild. 2302; IL 1243; G 2402; CANB 331284; SY 707108. Collected in Northern Territory, Australia. Latitude 18° 42' S. Longitude 130° 16' E. Elevation 400 m. 9.6 km north northwest of Mount Winnecke.

The following were collected by James M. Stewart, University of Arkansas, Department of Crop, Soil, & Environmental Sciences, Fayetteville, Arkansas 72701, United States. Donated by Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States; James M. Stewart, University of Arkansas, Department of Crop, Soil, & Environmental Sciences, Fayetteville, Arkansas 72701, United States. Received 11/27/2007.

PI 653469. *Glycine pindanica* Tindale & Craven

Wild. G 2938; IL 1251; UArk-9279; SY 707112; DLEG 940134; SC-2. Collected 01/01/1985 in Western Australia, Australia. Latitude 17° 31' S. Longitude 122° 16' E. Elevation 100 m. Mine survey rd., 2 km W of Beagle Bay Rd., Cape Leveque area 50 km north of Broome.

PI 653470. *Glycine pindanica* Tindale & Craven

Wild. UArk-9280; IL 1252; G 2939; SY 707113; SC-4. Collected 01/01/1985 in Western Australia, Australia. Latitude 17° 33' S. Longitude 122° 22' E. The Roadhouse, a grove of *Eucalyptus? jensenii* along the Beagle Bay Rd.

The following were collected by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Burdon, CSIRO, Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653471. *Glycine clandestina* J. C. Wendl.

Wild. coll# 01301; IL 1253; G 2916; SY 707114. Collected 11/12/1991 in Western Australia, Australia. Latitude 34° 25' S. Longitude 118° 45' E. Elevation 50 m. Pallinup R. crossing, Hassell Highway, Southwest bank, Albany side.

The following were collected by J.B. Martin. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653472. *Glycine pindanica* Tindale & Craven

Wild. Martin# 055; IL 1283; G 2504; SY 707118. Collected 04/14/1985 in Western Australia, Australia. Latitude 17° 34' S. Longitude 122° 22' E. Elevation 120 m. 53 km. north of Broome on Beagle Bay Road.

The following were collected by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653473. *Glycine tomentella* Hayata

Wild. coll# 01345; CANB 464078; G 2949; IL 1286; id# 0890; SY 707119. Collected 09/25/1993 in Western Australia, Australia. Latitude 17° 51' S. Longitude 122° 30' E. Elevation 40 m. 150 m west of Roebuck Roadhouse, 33 km from Broome.

PI 653474. *Glycine tomentella* Hayata

Wild. coll# 01346; CANB 464080; G 2950; IL 1287; id# 0891; SY 707120. Collected 09/26/1993 in Western Australia, Australia. Latitude 17° 58' S. Longitude 122° 13' E. Elevation 5 m. Corner of Guy Street and Port Drive (in,near?) Broome.

PI 653475. *Glycine tomentella* Hayata

Wild. coll# 01350; IL 1288; G 2953; CANB 464085; id# 0895; SY 707121. Collected 09/26/1993 in Western Australia, Australia. Latitude 17° 50' S. Longitude 122° 17' E. Elevation 35 m. 16.6 km north of Broome PO towards Beagle Bay.

The following were collected by L. Craven, CSIRO, Division of Plant Industry, General Post Office Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Jewel M. Stewart, 7505 CR 129, Tyler, Texas 75703, United States; Paul A. Fryxell, University of Texas, Dept. of Botany, Austin, Texas 78713, United States. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653476. *Glycine arenaria* Tindale

Wild. CFS 4872; IL 1294; G 2050; CANB 375968; SY 707122. Collected 06/20/1985 in Northern Territory, Australia. Latitude 15° 47' S. Longitude 129° 6' E. Elevation 150 m. 30 km E of Kununurra, near Keep River National Park.

The following were collected by E.A. Henty. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653477. *Glycine arenaria* Tindale

Wild. 28; IL 1295; G 2899; SY 707123. Collected 01/01/1986 in Western Australia, Australia. Kununurra District.

The following were collected by R. Pullen, CSIRO, Division of Plant Industry, Plant Introd. and Seed Exchange Unit, Canberra, Austr. Capital Terr., Australia; J. Grant, CSIRO, Canberra, Austr. Capital Terr., Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653478. *Glycine argyrea* Tindale

Wild. 0717+; IL 1300; G 2002; CANB 355552; ID#11082+; SY 707124. Collected 12/16/1984 in Queensland, Australia. Latitude 25° 56' S. Longitude 153° 6' E. Elevation 130 m. 4 km south of Rainbow Beach on Freshwater Track, near Noosa Head.

The following were collected by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653478 A. *Glycine argyrea* Tindale

Wild. 0717+; IL 1300-1; G 2002; SY 707124. Collected 12/16/1984 in Queensland, Australia. Latitude 25° 56' S. Longitude 153° 6' E. Elevation 130 m. 4 km south of Rainbow Beach on Freshwater Track, near Noosa Head.

PI 653478 B. *Glycine argyrea* Tindale

Wild. 0717+; IL 1300-2; (G 2002); SY 707124. Collected 12/16/1984 in Queensland, Australia. Latitude 25° 56' S. Longitude 153° 6' E. Elevation 130 m. 4 km south of Rainbow Beach on Freshwater Track, near Noosa Head.

The following were collected by I.B. Staples, Department of Primary Industry, Marceba, Queensland, Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601,

Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653479. *Glycine curvata* Tindale

Wild. IBS2575; CANB 348790; G 1680; IL 1307; SY 707125. Collected 04/25/1982 in Queensland, Australia. Latitude 17° 10' S. Longitude 145° 17' E. Elevation 500 m. Springmount Road, 4.7 km from Mareeba -Dimbulah Road, near Mareeba.

The following were collected by R.J. Lawn, CSIRO, Division of Tropical Crops and Pastures, 306 Carmody Road, St Lucia, Queensland 4067, Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653480. *Glycine curvata* Tindale

Wild. CQ2272; IL 1308; G 2619; Acc505; SY 707126. Collected 07/14/1983 in Queensland, Australia. Latitude 16° 31' S. Longitude 145° 29' E. Elevation 1 m. 20 km S of Port Douglas.

The following were collected by R. Pullen, CSIRO, Division of Plant Industry, Plant Introd. and Seed Exchange Unit, Canberra, Austr. Capital Terr., Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653481. *Glycine cyrtoloba* Tindale

Wild. IL 1329; G 2754; SY 707127. Collected 08/27/1988 in Queensland, Australia. Latitude 18° 20' S. Longitude 145° 59' E. Elevation 550 m. Attie Creek Falls, near Cardwell.

The following were collected by L. Craven, CSIRO, Division of Plant Industry, General Post Office Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Jewel M. Stewart, 7505 CR 129, Tyler, Texas 75703, United States; Paul A. Fryxell, University of Texas, Dept. of Botany, Austin, Texas 78713, United States. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653482. *Glycine tomentella* Hayata

Wild. CFS 4563; CANB 375963; G 2052; IL 1336; SY 707128. Collected 05/30/1985 in Western Australia, Australia. Latitude 16° 37' S. Longitude 123° 45' E. Elevation 200 m. 10 km WNW of Kimbolton Station in Trent River Valley, north of Derby.

PI 653483. *Glycine tomentella* Hayata

Wild. CFS 4610; IL 1337; G 2053; CANB 375964; SY 707129. Collected 06/02/1985 in Western Australia, Australia. Latitude 16° 8' S. Longitude 123° 46' E. Elevation 200 m. Koolan Island, Yampi Sound. 94 mm annual rain fall.

PI 653484. *Glycine tomentella* Hayata

Wild. CFS 4625; IL 1339; G 2055; CANB 375966; SY 707130. Collected 06/05/1985 in Western Australia, Australia. Latitude 16° 52' S. Longitude 125° 49' E. Elevation 400 m. Galvan's Gorge, 20 km southwest of Mt. Barnett Homestead. annual rainfall 80mm.

PI 653485. *Glycine tomentella* Hayata

Wild. CFS 4630; IL 1340; G 2056; CANB 375967; SY 707131. Collected 06/06/1985 in Western Australia, Australia. Latitude 15° 40' S. Longitude 126° 23' E. Elevation 365 m. Meelarrie Creek, Kalumburu Road.

The following were collected by J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; L. Craven, CSIRO, Division of Plant Industry, General Post Office Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; G. Second, CSIRO, Canberra, Austr. Capital Terr., Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653486. *Glycine tomentella* Hayata

Wild. 01007; CANB 389239; G 2569; IL 1342; ID#0277; SY 707132. Collected 05/10/1987 in Northern Territory, Australia. Latitude 15° 23' S. Longitude 133° 10' E. Elevation 177 m. 14.8 km north of Larrimah.

PI 653487. *Glycine tomentella* Hayata

Wild. 01019; IL 1345; G 2576; CANB 389351; ID#0286; SY 707133. Collected 05/12/1987 in Northern Territory, Australia. Latitude 16° 58' S. Longitude 137° 58' E. Elevation 50 m. Redbank Mine Area, 215.8 km east of Borroloola, near Wollorgorang. 75 mm annual rainfall.

The following were collected by J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; L. Craven, CSIRO, Division of Plant Industry, General Post Office Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653488. *Glycine tomentella* Hayata

Wild. 01048; IL 1346; G 2579; SY 707134. Collected 05/23/1987 in Northern Territory, Australia. Latitude 14° 6' S. Longitude 132° 8' E. Elevation 150 m. 24.1 km north of Katharine, 65.3 km south of Pine Creek.

The following were collected by R. Pullen, CSIRO, Division of Plant Industry, Plant Introd. and Seed Exchange Unit, Canberra, Austr. Capital Terr., Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O.

Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653489. *Glycine tomentella* Hayata

Wild. CANB 384280; IL 1355; G 2723; ID#11241; SY 707138. Collected 05/22/1988 in Northern Territory, Australia. Latitude 17° 37' S. Longitude 133° 36' E. Elevation 220 m. 10 km south of Elliott toward Renner Springs,.

The following were collected by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States; L. Craven, CSIRO, Division of Plant Industry, General Post Office Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653490. *Glycine tomentella* Hayata

Wild. GBCH 0336; CANB 354438; G 2766; IL 1356; ID#0201; SY 707139. Collected 06/30/1984 in Western Australia, Australia. Latitude 16° 31' S. Longitude 126° 21' E. Elevation 260 m. Hann River, both sides of river.

The following were collected by J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; L. Craven, CSIRO, Division of Plant Industry, General Post Office Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; G. Second, CSIRO, Canberra, Austr. Capital Terr., Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653491. *Glycine tomentella* Hayata

Wild. GCS 01023; IL 1365; G 2577; CANB 389191; SY 707140. Collected 05/13/1987 in Queensland, Australia. Latitude 18° 2' S. Longitude 138° 51' E. Elevation 40 m. Near Bowthorn turnoff, 92.2 km southwest of Burketown, near Doomadgee.

PI 653492. *Glycine tomentella* Hayata

Wild. GCS 01025; IL 1366; G 2578; CANB 389188; ID#0292; SY 707141. Collected 05/15/1987 in Queensland, Australia. Latitude 17° 27' S. Longitude 140° 51' E. Elevation 15 m. 2 km from Karumba towards Normanton.

The following were collected by C. Dunlop. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653493. *Glycine tomentella* Hayata

Wild. IL 1367; G 2581; ID#DNA10660; SY 707142. Collected 04/01/1976 in Northern Territory, Australia. Latitude 12° 17' S. Longitude 136° 51' E. Elevation 45 m. Gove, rampant weed in mining area, lateritic soil.

The following were collected by J. S. Hsieh, National Taiwan University, Department of Agronomy, 4 Roosevelt Road, Taipei, Taiwan. Donated by Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States; J. S. Hsieh, National Taiwan University, Department of Agronomy, 4 Roosevelt Road, Taipei, Taiwan. Received 11/27/2007.

PI 653494. *Glycine dolichocarpa* Tateishi & H. Ohashi

Wild. TOM 038; IL 1370; SY 707143. Collected 11/01/1988 in Taiwan. Gialuland village, Taitung District, Taiwan. Southeast coast of Taiwan. breezy, dry, sand, high in salt?.

PI 653495. *Glycine dolichocarpa* Tateishi & H. Ohashi

Wild. TOM 039; IL 1371; SY 707144. Collected 11/01/1988 in Taiwan. Tonho village, Taitung District, Taiwan Southeast coast of Taiwan. breezy, dry, sand, high in salt?.

PI 653496. *Glycine dolichocarpa* Tateishi & H. Ohashi

Wild. TOM 040; IL 1372; SY 707145. Collected 11/01/1988 in Taiwan. Tonho village, Taitung District, Taiwan Southeast coast of Taiwan. breezy, dry, sand, high in salt?.

The following were collected by Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653497. *Glycine tomentella* Hayata

Wild. IL 1435; SY 707147. Collected 09/08/1997 in Taiwan. Contract farm, red sandy soil, Shiko San, Kinman.

PI 653498. *Glycine tomentella* Hayata

Wild. IL 1436; SY 707148. Collected 09/08/1997 in Taiwan. Field in which nitrogen was applied, Institute of Agriculture, Kinman.

PI 653499. *Glycine tomentella* Hayata

Wild. IL 1437; SY 707149. Collected 09/09/1997 in Taiwan. Cemetery, Ching-Chen, Kinmen.

PI 653500. *Glycine tabacina* (Labill.) Benth.

Wild. IL 1438; SY 707150. Collected 09/09/1997 in Taiwan. Cemetery, Ching-Chen, Kinmen.

PI 653501. *Glycine tomentella* Hayata

Wild. IL 1440; SY 707152. Collected 09/09/1997 in Taiwan. Side of embankment, Dou-Men, Kinmen.

PI 653502. *Glycine tomentella* Hayata

Wild. IL 1441; SY 707153. Collected 09/08/1997 in Taiwan. Sandy field, Chien Chu, Kinmen.

The following were collected by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States; D. Albrecht. Donated by J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653503. *Glycine falcata* Benth.

Wild. 01541; IL 1442; G 3024; SY 707154. Collected 08/30/1996 in Northern Territory, Australia. Latitude 23° 22' S. Longitude 133° 9' E. Elevation 640 m. Floodway near Mt Hay Bore, 78.5 km west of Stuart Highway along Tanami.

The following were collected by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Donated by J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653504. *Glycine canescens* F. J. Herm.

Wild. 01542; IL 1443; G 3025; SY 707155. Collected 08/31/1996 in Northern Territory, Australia. Latitude 23° 27' S. Longitude 133° 50' E. Elevation 710 m. 16 Mile Creek, 29 km north of Alice Springs.

PI 653505. *Glycine canescens* F. J. Herm.

Wild. 01579; IL 1444; G 3041; id no. 1023; SY 707156. Collected 09/07/1996 in Northern Territory, Australia. Latitude 22° 58' S. Longitude 134° 1' E. Elevation 700 m. Edwards Creek crossing, 18.3 km along Plenty Highway from Sandover Highway.

PI 653506. *Glycine canescens* F. J. Herm.

Wild. 01575; IL 1445; G 3051; SY 707157. Collected 09/06/1997 in Northern Territory, Australia. Latitude 21° 9' S. Longitude 134° 52' E. Elevation 464 m. "Murray Downs Station", growing alongcreekline of South East Creek.

The following were collected by R. Pullen, CSIRO, Division of Plant Industry, Plant Introd. and Seed Exchange Unit, Canberra, Austr. Capital Terr., Australia; J. Grant, CSIRO, Canberra, Austr. Capital Terr., Australia. Donated by CSIRO, Division of Plant Industry, General Post Office Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653507. *Glycine stenophita* B. E. Pfeil & Tindale

Wild. 0549; CANB 438281; G 1651; IL 1446; SY 707158. Collected in New South Wales, Australia. Latitude 30° 13' S. Longitude 149° 49' E. Elevation 228 m. 15 km. from Narrabri on Newell Highway, nearest named locality Narrabri.

The following were collected by J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; S. Speer, CSIRO, Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Donated by CSIRO, Division of Plant Industry, General Post Office Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 11/27/2007.

PI 653508. *Glycine stenophita* B. E. Pfeil & Tindale

Wild. 0615; IL 1447; G 1974; CANB 438250; SY 707159. Collected in New South Wales, Australia. Latitude 31° 20' S. Longitude 148° 45' E. 38 km from Castlereagh Highway towards Warrumbungle N/P, near Tooraweenah, near Girlargambone.

The following were developed by Northwest Plant Breeding. Received 04/03/2008.

PI 653509. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "FINEWAY"; FX001B; NSGC 18895. Pedigree - induced mutant in Finley (PI586757). Hard red winter wheat. Carries a mutation for tolerance to the imidazolinone herbicide BEYOND(tm).

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 Bernardino, California 92415-0730, United States. Received 08/19/1994.

PI 653510. *Trifolium isthmocarpum* Brot.

Wild. T030.CPG94; Grif 14203; W6 16004. 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 closed, seasonal tall grass. Surrounding veg. agri., dryland wheat. Dominant herb/grass sp. couch, bermuda. Population abundance frequent, distribution patchy. Growth habit semi-erect.

PI 653511. *Trifolium isthmocarpum* Brot.

Wild. T072.CPG94; Grif 14208; W6 16046. Collected 06/25/1994 in Tunisia. Latitude 37° 10' 40" N. Longitude 9° 43' 53" E. Elevation 1 m. Near Menzer Bourguiba, 5 k north of Menzer Bourguiba on P11 Hw. Grazed. Slope 0-5%, aspect W. Area open. Soil clay, pH 9.0. Rainfall 550 mm. Seasonally dry, alluvial fan, beside salt lake Ichkeul. Vegetation closed, seasonal short grass. Surrounding veg. dryland wheat. Population abundance occasional, distribution patchy. Growth habit semi-erect.

The following were developed by Honda Motor Co. Ltd., Tokyo, Japan. Donated by Honda Motor Co. Ltd., Pennsylvania, United States. Received 03/28/2008.

PI 653512 PVPO. *Oryza sativa* L.

Cultivar. "KOSHIHIKARI KAZUSA 1 gou". PVP 200800056.

The following were developed by Arkansas Agricultural Experiment Station, University of Arkansas, Arkansas, United States. Received 03/28/2008.

PI 653513 PVPO. *Oryza sativa* L.

Cultivar. "CL171-AR". PVP 200800166.

The following were developed by Bayer CropScience, Canada. Received 04/03/2008.

PI 653514 PVPO. *Brassica napus* L.

Cultivar. "PPS02-364". PVP 200700027.

The following were developed by Pure Line Seeds, Inc., P.O. Box 8866, Moscow, Idaho 83843, United States. Received 04/03/2008.

PI 653515 PVPO. *Pisum sativum* L.

Cultivar. "SNOW SWEET". PVP 200800124.

The following were developed by Jajo Genetics, Baton Rouge, Louisiana, United States. Received 04/03/2008.

PI 653516 PVPO. *Gossypium hirsutum* L.

Cultivar. "JAJ0 1201". PVP 200800125.

PI 653517 PVPO. *Gossypium hirsutum* L.

Cultivar. "JAJ0 1200". PVP 200800126.

The following were developed by WestBred LLC, United States. Received 04/03/2008.

PI 653518 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "VANTAGE"; CA-902-704. PVP 200800127. Pedigree - Keystone/Granite.

The following were developed by Rutgers, The State University of New Jersey, New Jersey, United States. Received 04/03/2008.

PI 653519 PVPO. Festuca arundinacea Schreb.
Cultivar. "FIRENZA". PVP 200800128.

The following were developed by Rutgers, The State University of New Jersey, New Jersey, United States; Pickseed USA, Inc., United States. Received 04/03/2008.

PI 653520 PVPO. Poa hybrid
Cultivar. "BANDERA". PVP 200800129.

The following were developed by Kansas Agricultural Experiment Station, Kansas, United States. Received 04/03/2008.

PI 653521 PVPO. Triticum aestivum L. subsp. aestivum
Cultivar. "FULLER"; KS00F5-14-7. PVP 200800130. Pedigree - selected from a population with an unknown pedigree. Released 2007.

The following were developed by Pure Seed Testing, Inc., United States. Received 04/03/2008.

PI 653522 PVPO. Agrostis stolonifera var. palustris (Huds.) Farw.
Cultivar. "CRYSTAL BLUELINKS". PVP 200800131.

The following were developed by WestBred LLC, United States. Received 04/03/2008.

PI 653523 PVPO. Hordeum vulgare L. subsp. vulgare
Cultivar. Pureline. "SALUTE". PVP 200800132. Pedigree - Bob/2*Baronesse.

The following were developed by Cotton Seed Int'l. Proprietary Limited, Wee Waa, Australia; Bayer CropScience GMBH, Germany. Received 04/03/2008.

PI 653524 PVPO. Gossypium hirsutum L.
Cultivar. "FM 835LLB2". PVP 200800133.

The following were developed by Enza Zaden Beheer B.V., Netherlands. Received 04/03/2008.

PI 653525 PVPO. Lactuca sativa L.
Cultivar. "BENITO". PVP 200800134.

The following were developed by NexGen Turf Research, LLC, United States. Received 04/03/2008.

PI 653526 PVPO. Poa pratensis L.
Cultivar. "AKB287". PVP 200800155.

The following were developed by Regents of the University of Minnesota, Minnesota, United States. Received 04/03/2008.

PI 653527 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. "CROMWELL". PVP 200800159.

The following were developed by Pure Seed Testing, Inc., United States. Received 04/03/2008.

PI 653528 PVPO. *Cynodon dactylon* (L.) Pers.
Cultivar. "CASINO ROYALE". PVP 200800162.

The following were developed by DLF International Seeds, Inc., United States. Received 04/03/2008.

PI 653529 PVPO. *Agrostis canina* L.
Cultivar. "VILLA". PVP 200800167.

The following were developed by WestBred LLC, United States. Received 04/03/2008.

PI 653530 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "JEDD". PVP 200800169. Pedigree - BZ9M01-1015*4/Teal 11-a. Hard red spring wheat.

The following were developed by Sakata Seed Corporation, Japan. Received 04/03/2008.

PI 653531 PVPO. *Zinnia* hybrid
Cultivar. "Profusion Double Fire". PVP 200800170.

PI 653532 PVPO. *Zinnia* hybrid
Cultivar. "Profusion Double Golden". PVP 200800171.

PI 653533 PVPO. *Zinnia* hybrid
Cultivar. "Profusion Double White". PVP 200800172.

The following were developed by Meridian Seeds, LLC, United States. Received 04/03/2008.

PI 653534 PVPO. *Cicer arietinum* L.
Cultivar. "CDC FRONTIER". PVP 200800173.

The following were developed by Regents of the University of California, California, United States. Received 04/03/2008.

PI 653535 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. "LASSIK". PVP 200800176. Pedigree - Developed from Anza by three independent backcrossing programs: Madsen/6*Anza; Glupro-GPC/6*Anza; Glupro-Glutenins/6*Anza.

The following were developed by Bayer CropScience, United States. Received 04/03/2008.

PI 653536 PVPO. *Brassica napus* L.
Cultivar. "PPS01-140B-Line". PVP 200700028.

The following were developed by Pure Seed Testing, Inc., United States. Received 04/03/2008.

PI 653537 PVPO. *Poa pratensis* L.
Cultivar. "WINTER BLUE". PVP 200800177.

The following were developed by Archer-Daniels-Midland Company, United States. Received 04/03/2008.

PI 653538 PVPO. *Phaseolus vulgaris* L.
Cultivar. "SHANIA". PVP 200800184.

Unknown source. Received 04/03/2008.

PI 653539 PVPO. *Glycine max* (L.) Merr.
Cultivar. "SD1161RR/SCN". PVP 200800185. Developed in United States.

The following were collected by Gerald Seiler, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States; Laura Marek, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Donated by Laura Marek, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 09/26/2007.

PI 653540. *Helianthus ciliaris* DC.
Wild. CIL-2555a; Ames 29274. Collected 09/20/2007 in Texas, United States. Latitude 35° 16' 21" N. Longitude 102° 38' 0" W.
Elevation 1240 m. North side of old Route 66 (exists as frontage road on north side of Interstate 10), between the road and railroad, 11 miles west of junction with Highway 385, Vega. Silty clay soil. Associated with mostly grasses and scattered *Helianthus annuus* as small plants and large clumps.

PI 653541. *Helianthus ciliaris* DC.
Wild. CIL-2556; Ames 29276. Collected 09/20/2007 in Oklahoma, United States. Latitude 36° 45' 44" N. Longitude 101° 56' 56" W.
Elevation 1097 m. North side of Highways 412/64/3, 2 miles west of junction with Highway 95, Four Corners. Weedy edge of fallowed irrigated circle field to roadside. Associated with grasses and no other *Helianthus*.

PI 653542. *Helianthus ciliaris* DC.
Wild. CIL-2558; Ames 29278. Collected 09/22/2007 in Texas, United States. Latitude 31° 11' 21" N. Longitude 103° 34' 41" W. Elevation 827 m. West side of Highway 17, 15.9 miles south of junction with

Interstate 20 business loop, Pecos. Weedy area between highway and railroad. Sandy soil.

PI 653543. *Helianthus ciliaris* DC.

Wild. CIL-2561; Ames 29280. Collected 09/22/2007 in Texas, United States. Latitude 30° 57' 46" N. Longitude 102° 53' 2" W. Elevation 878 m. Both sides of Highway 18 (mostly east side), 3.7 miles north of Interstate 10, Fort Stockton. Waterless, grassy irrigation ditch. Gravelly, sandy soil.

PI 653544. *Helianthus ciliaris* DC.

Wild. CIL-2566; Ames 29282. Collected 09/24/2007 in Texas, United States. Latitude 31° 25' 0" N. Longitude 106° 2' 48" W. Elevation 1089 m. North side of Highway 20, ~3 miles southeast of Tornillo. Along irrigation ditch. Sandy loam soil.

PI 653545. *Helianthus laciniatus* A. Gray

Wild. LAC-2563; Ames 29283. Collected 09/24/2007 in Texas, United States. Latitude 30° 21' 12" N. Longitude 103° 39' 54" W. Elevation 1365 m. Southeast corner of intersection between Gallego Avenue and 10th Street, south of Alpine Creek, Alpine. Between street and sidewalk and into vacant lot. Sandy soil.

PI 653546. *Helianthus laciniatus* A. Gray

Wild. LAC-2565; Ames 29285. Collected 09/24/2007 in Texas, United States. Latitude 31° 2' 0" N. Longitude 104° 49' 50" W. Elevation 1228 m. Mostly north and some south of un-named dirt road going west, west side of Highway 90, 0.3 mile south of Interstate 10, Van Horn. along fencerow and into fenced pasture.

PI 653547. *Helianthus annuus* L.

Wild. ANN-2580; Ames 29286. Collected 10/01/2007 in New Mexico, United States. Latitude 33° 54' 7" N. Longitude 106° 52' 7" W. Elevation 1383 m. West side of Highway 1, 1.1 miles south of junction with Highway 380, San Antonio. Grassy, weedy fence row next to irrigated field. Silty clay soil. Associated with *Helianthus annuus*.

PI 653548. *Helianthus arizonensis* R. C. Jacks.

Wild. ARI-2573; Ames 29287. Collected 09/27/2007 in Arizona, United States. Latitude 32° 49' 19" N. Longitude 109° 41' 16" W. Elevation 896 m. South side of Highway 70, 1.5 miles southeast of junction with Highway 191, Safford. Ditch between highway and railroad. Sandy loam soil.

PI 653549. *Helianthus arizonensis* R. C. Jacks.

Wild. ARI-2575; Ames 29288. Collected 09/30/2007 in Arizona, United States. Latitude 34° 36' 35" N. Longitude 109° 19' 14" W. Elevation 1712 m. Primarily east side of Highway 191/61, 7.8 miles northeast of intersection with Highway 180, Saint Johns. Edge of dried playa. Silty clay soil.

PI 653550. *Helianthus ciliaris* DC.

Wild. CIL-2576; Ames 29292. Collected 09/30/2007 in Arizona, United States. Latitude 34° 9' 12" N. Longitude 109° 17' 56" W. Elevation 2109 m. Near Becker Lake, north of Little Colorado River

crossing, west side of Highway 191, 1.5 miles northwest of junction with Highway 60 E, Springerville. Large population within fenced meadow; sampled portion in highway right-of-way.

PI 653551. *Helianthus ciliaris* DC.

Wild. CIL-2579; Ames 29294. Collected 10/01/2007 in New Mexico, United States. Latitude 33° 54' 7" N. Longitude 106° 52' 7" W. Elevation 1383 m. West side of Highway 1, 1.1 miles south of junction with Highway 380, San Antonio. Grassy, weedy fence row next to irrigated field. Silty clay soil. Associated with *Helianthus annuus*.

PI 653552. *Helianthus ciliaris* DC.

Wild. CIL-2581; Ames 29295. Collected 10/01/2007 in New Mexico, United States. Latitude 33° 4' 8" N. Longitude 106° 0' 56" W. Elevation 1370 m. West side of Highways 54/70, between gravel lot and curb, 9.1 miles north of junction with Highway 82, southern edge of Tularosa. Silty loam soil.

PI 653553. *Helianthus ciliaris* DC.

Wild. CIL-2582; Ames 29296. Collected 10/02/2007 in New Mexico, United States. Latitude 32° 52' 9" N. Longitude 104° 24' 1" W. Elevation 1028 m. Both sides of Highway 357 between State Roads 229 and 357, 1.6 miles north of junction with Highway 82, Artesia. Roadside ditch and fencerow adjacent to soybean field on the west; roadside between road and railroad on the east. Sandy loam soil.

PI 653554. *Helianthus ciliaris* DC.

Wild. CIL-2583; Ames 29297. Collected 10/02/2007 in Texas, United States. Latitude 33° 7' 17" N. Longitude 102° 59' 52" W. Elevation 1139 m. North side of Highway 82, 11.5 miles southwest of junction with Highway 214, Plains. Under power line and into prairie appearing habitat; irrigated cotton field on east side of highway.

PI 653555. *Helianthus ciliaris* DC.

Wild. CIL-2584; Ames 29298. Collected 10/02/2007 in Texas, United States. Latitude 33° 52' 37" N. Longitude 102° 45' 37" W. Elevation 1155 m. East side of Highway 214 (scattered plants on west side of highway also), 0.1 mile north of city limits sign on north side of Enochs. Irrigated cultivated sunflower field on west side of highway. Sandy loam soil.

PI 653556. *Helianthus ciliaris* DC.

Wild. CIL-2585; Ames 29299. Collected 10/02/2007 in Texas, United States. Latitude 34° 21' 41" N. Longitude 102° 58' 21" W. Elevation 1245 m. West side of Highway 70/84, 5.2 miles southeast of junction with Highway 60, Farwell. Weedy patch at powerline and irrigation pump, non-reproductive plants in surrounding fallow fields. Sandy loam soil.

PI 653557. *Helianthus ciliaris* DC.

Wild. CIL-2586; Ames 29300. Collected 10/02/2007 in Texas, United States. Latitude 34° 35' 40" N. Longitude 102° 47' 4" W. Elevation 1259 m. West side of Highway 60, along both sides of County Road K1, 4.5 miles southwest of junction with Rural Road 2013 (West 11th Street), Friona. Weedy roadside ditches. Sandy loam soil.

The following were collected by Gerald Seiler, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States; Laura Marek, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States; David Lee Anderson, United States Army, Environment and Safety Directorate, Building 163, White Sands, New Mexico 88002, United States. Donated by Laura Marek, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 10/03/2007.

PI 653558. *Helianthus laciniatus* A. Gray

Wild. LAC-2567; Ames 29301. Collected 09/25/2007 in New Mexico, United States. Latitude 32° 23' 7" N. Longitude 106° 24' 51" W. Elevation 1202 m. West side of Range Road 19, area west of West Dry Lake Tank, White Sands Missile Range (restricted access, escort required). Playa, dry at time of collection, was under water approximately November 2006 to March 2007. Silty clay soil.

PI 653559. *Helianthus laciniatus* A. Gray

Wild. LAC-2568; Ames 29302. Collected 09/25/2007 in New Mexico, United States. Latitude 32° 23' 7" N. Longitude 106° 22' 36" W. Elevation 1198 m. West side of Range Road 3, East Dry Lake, White Sands Missile Range (restricted access, escort required). Playa, dry at time of collection. Silty clay soil.

PI 653560. *Helianthus laciniatus* A. Gray

Wild. LAC-2569; Ames 29303. Collected 09/25/2007 in New Mexico, United States. Latitude 32° 26' 11" N. Longitude 106° 22' 1" W. Elevation 1204 m. Hackberry Tank, south of Range Road 202, White Sands Missile Range (restricted access, escort required). Playa, less than half the size of LAC-2567 and LAC-2568 sites. Silty clay soil. Associated with trees.

The following were collected by Gerald Seiler, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States; Laura Marek, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Donated by Laura Marek, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 10/03/2007.

PI 653561. *Helianthus laciniatus* A. Gray

Wild. LAC-2570; Ames 29304. Collected 09/25/2007 in New Mexico, United States. Latitude 33° 6' 54" N. Longitude 107° 17' 46" W. Elevation 1290 m. Northeast roadside ditch, South Broadway Street at entrance to Interstate 25 (Exit 75), Williamsburg. Weedy roadside drainage ditch. Sandy loam soil.

PI 653562. *Helianthus laciniatus* A. Gray

Wild. LAC-2571; Ames 29305. Collected 09/26/2007 in New Mexico, United States. Latitude 32° 14' 34" N. Longitude 107° 28' 11" W. Elevation 1259 m. South side of Highway 547, 15.2 miles east of Exit 85 off Interstate 10, Deming. Loamy dried playa at drainage.

The following were collected by David Lee Anderson, United States Army, Environment and Safety Directorate, Building 163, White Sands, New Mexico 88002, United States; Gregory Silsby, United States. Donated by David Lee

Anderson, United States Army, Environment and Safety Directorate, Building 163, White Sands, New Mexico 88002, United States. Received 12/12/2007.

PI 653563. *Helianthus ciliaris* DC.

Wild. CIL-2587; Ames 29311. Collected 10/18/2007 in New Mexico, United States. Latitude 33° 44' 41" N. Longitude 106° 19' 6" W.
Elevation 2173 m. Banks of Selso Martinez dirt tank, Range Road 9, White Sands Missile Range, Oscura Mountains, Socorro County. Corolla color yellow.

The following were collected by Sue Thompson, Department of Primary Industries, Toowoomba, Queensland, Australia; Jeff Mitchell, Department of Primary Industries, Toowoomba, Queensland, Australia. Donated by Thomas Gulya, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States; Gerald Seiler, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States. Received 12/20/2007.

PI 653564. *Helianthus annuus* L.

Wild. NSW-002; Ames 29314. Collected 04/19/2006 in Australia.

PI 653565. *Helianthus annuus* L.

Wild. NSW-003; Ames 29315. Collected 04/19/2006 in Australia.

PI 653566. *Helianthus annuus* L.

Wild. NSW-004; Ames 29316. Collected 04/19/2006 in Australia.

PI 653567. *Helianthus annuus* L.

Wild. NSW-005; Ames 29317. Collected 04/19/2006 in Australia.

PI 653568. *Helianthus annuus* L.

Wild. NSW-007; Ames 29319. Collected 04/19/2006 in Australia.

PI 653569. *Helianthus annuus* L.

Wild. NSW-008; Ames 29320. Collected 04/20/2006 in Australia.

PI 653570. *Helianthus annuus* L.

Wild. NSW-009; Ames 29321. Collected 04/20/2006 in Australia.

PI 653571. *Helianthus annuus* L.

Wild. NSW-010; Ames 29322. Collected 04/20/2006 in Australia.

PI 653572. *Helianthus annuus* L.

Wild. NSW-011; Ames 29323. Collected 04/20/2006 in Australia.

PI 653573. *Helianthus annuus* L.

Wild. NSW-012; Ames 29324. Collected 04/20/2006 in Australia.

PI 653574. *Helianthus annuus* L.

Wild. NSW-013; Ames 29325. Collected 04/20/2006 in Australia.

PI 653575. *Helianthus annuus* L.

Wild. NSW-014; Ames 29326. Collected 04/20/2006 in Australia.

PI 653576. *Helianthus annuus* L.

Wild. NSW-015; Ames 29327. Collected 04/20/2006 in Australia.

The following were collected by Thomas Gulya, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States; Gerald Seiler, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States; Gary Kong, Farming Systems Institute, Queensland Department of Primary Industries, P.O. Box 102, Toowoomba, Queensland Q4350, Australia; Sue Thompson, Department of Primary Industries, Toowoomba, Queensland, Australia. Donated by Thomas Gulya, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States; Gerald Seiler, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States. Received 12/20/2007.

PI 653577. *Helianthus annuus* L.

Wild. QLD-001; Ames 29328. Collected 03/12/2007 in Australia.

PI 653578. *Helianthus annuus* L.

Wild. QLD-002; Ames 29329. Collected 03/12/2007 in Australia.

The following were collected by Sue Thompson, Department of Primary Industries, Toowoomba, Queensland, Australia; Jeff Mitchell, Department of Primary Industries, Toowoomba, Queensland, Australia. Donated by Thomas Gulya, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States; Gerald Seiler, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States. Received 12/20/2007.

PI 653579. *Helianthus annuus* L.

Wild. QLD-005; Ames 29330. Collected 04/27/2006 in Australia.

PI 653580. *Helianthus annuus* L.

Wild. QLD-006; Ames 29331. Collected 04/27/2006 in Australia.

PI 653581. *Helianthus annuus* L.

Wild. QLD-008; Ames 29332. Collected 04/27/2006 in Australia.

PI 653582. *Helianthus annuus* L.

Wild. QLD-009; Ames 29333. Collected 04/27/2006 in Australia.

PI 653583. *Helianthus annuus* L.

Wild. SAE-001; Ames 29334. Collected 03/05/2007 in Australia.

PI 653584. *Helianthus annuus* L.

Wild. SAE-002; Ames 29335. Collected 03/06/2007 in Australia.

PI 653585. *Helianthus annuus* L.

Wild. SAE-003; Ames 29336. Collected 03/06/2007 in Australia.

PI 653586. *Helianthus annuus* L.

Wild. SAE-004; Ames 29337. Collected 03/06/2007 in Australia.

PI 653587. *Helianthus annuus* L.

Wild. SAE-005; Ames 29338. Collected 03/06/2007 in Australia.

- PI 653588. *Helianthus annuus* L.**
Wild. SAE-006; Ames 29339. Collected 03/06/2007 in Australia.
- PI 653589. *Helianthus annuus* L.**
Wild. SAE-007; Ames 29340. Collected 03/06/2007 in Australia.
- PI 653590. *Helianthus annuus* L.**
Wild. SAE-008; Ames 29341. Collected 03/06/2007 in Australia.
- PI 653591. *Helianthus annuus* L.**
Wild. SAE-010; Ames 29343. Collected 03/07/2007 in Australia.
- PI 653592. *Helianthus annuus* L.**
Wild. SAE-011; Ames 29344. Collected 03/07/2007 in Australia.
- PI 653593. *Helianthus annuus* L.**
Wild. SAE-013; Ames 29346. Collected 03/07/2007 in Australia.

The following were collected by Thomas Gulya, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States; Gerald Seiler, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States; Gary Kong, Farming Systems Institute, Queensland Department of Primary Industries, P.O. Box 102, Toowoomba, Queensland Q4350, Australia. Donated by Thomas Gulya, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States; Gerald Seiler, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States. Received 12/20/2007.

- PI 653594. *Helianthus annuus* L.**
Wild. SAW-003; Ames 29350. Collected 03/06/2007 in Australia.
- PI 653595. *Helianthus annuus* L.**
Wild. SAW-004; Ames 29351. Collected 03/06/2007 in Australia.
- PI 653596. *Helianthus annuus* L.**
Wild. SAW-005; Ames 29352. Collected 03/06/2007 in Australia.
- PI 653597. *Helianthus annuus* L.**
Wild. SAW-006; Ames 29353. Collected 03/08/2007 in Australia.
- PI 653598. *Helianthus annuus* L.**
Wild. SAW-007; Ames 29354. Collected 03/08/2007 in Australia.

The following were collected by Sue Thompson, Department of Primary Industries, Toowoomba, Queensland, Australia; Jeff Mitchell, Department of Primary Industries, Toowoomba, Queensland, Australia. Donated by Thomas Gulya, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States; Gerald Seiler, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States. Received 12/20/2007.

- PI 653599. *Helianthus annuus* L.**
Wild. WAN-002; Ames 29356. Collected 02/27/2007 in Australia.

- PI 653600. *Helianthus annuus* L.**
Wild. WAN-003; Ames 29357. Collected 02/27/2007 in Australia.
- PI 653601. *Helianthus annuus* L.**
Wild. WAN-004; Ames 29358. Collected 02/28/2007 in Australia.
- PI 653602. *Helianthus annuus* L.**
Wild. WAN-006; Ames 29359. Collected 02/28/2007 in Australia.
- PI 653603. *Helianthus annuus* L.**
Wild. WAN-007; Ames 29360. Collected 02/28/2007 in Australia.
- PI 653604. *Helianthus annuus* L.**
Wild. WAN-008; Ames 29361. Collected 02/28/2007 in Australia.
- PI 653605. *Helianthus annuus* L.**
Wild. WAN-009; Ames 29362. Collected 02/28/2007 in Australia.
- PI 653606. *Helianthus annuus* L.**
Wild. WAN-010; Ames 29363. Collected 02/28/2007 in Australia.
- PI 653607. *Helianthus annuus* L.**
Wild. WAN-012; Ames 29365. Collected 03/01/2007 in Australia.

The following were collected by Thomas Gulya, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States; Gerald Seiler, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States; Gary Kong, Farming Systems Institute, Queensland Department of Primary Industries, P.O. Box 102, Toowoomba, Queensland Q4350, Australia. Donated by Thomas Gulya, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States; Gerald Seiler, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States. Received 12/20/2007.

- PI 653608. *Helianthus annuus* L.**
Wild. WAS-001; Ames 29367. Collected 03/01/2007 in Australia.

The following were collected by Thomas Gulya, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States; Gerald Seiler, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States; Gary Kong, Farming Systems Institute, Queensland Department of Primary Industries, P.O. Box 102, Toowoomba, Queensland Q4350, Australia; Sue Thompson, Department of Primary Industries, Toowoomba, Queensland, Australia. Donated by Thomas Gulya, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States; Gerald Seiler, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States. Received 12/20/2007.

- PI 653609. *Helianthus debilis* subsp. *cucumerifolius* (Torr. & A. Gray) Heiser**
Wild. QLD-003; Ames 29372. Collected 03/12/2007 in Australia.

PI 653610. *Helianthus debilis* subsp. *cucumerifolius* (Torr. & A. Gray) Heiser
Wild. QLD-004; Ames 29373. Collected 03/12/2007 in Australia.

The following were collected by Sue Thompson, Department of Primary Industries, Toowoomba, Queensland, Australia; Jeff Mitchell, Department of Primary Industries, Toowoomba, Queensland, Australia. Donated by Thomas Gulya, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States; Gerald Seiler, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States. Received 12/20/2007.

PI 653611. *Helianthus debilis* subsp. *cucumerifolius* (Torr. & A. Gray) Heiser
Wild. QLD-007; Ames 29374. Collected 04/27/2006 in Australia.

The following were donated by F.V. Nuez, Escuela Tecnica Sup. de Ing. Agronomos, Catedra de Genetica, Univers. Politecnica Camino de Vera S/N, Valencia, Valencia 46022, Spain. Received 07/22/1985.

PI 653612. *Solanum lycopersicum* L.
Cultivar. V-L-84. Collected 10/25/1984 in Spain. Separated from PI 513101 in 2007; fruit from this selection is medium round in size. Received through IBPGR, Rome, Italy. Sown December, transplanted May, harvested July. Self-consumption.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 08/11/2003.

PI 653613. *Trifolium subterraneum* L.
Uncertain. TKM37-306; Grif 15256. Collected 06/05/2002 in Turkmenistan. Latitude 38° 29' 25" N. Longitude 56° 6' 59" E. Elevation 934 m. Site No. 37.

PI 653614. *Trifolium subterraneum* L.
Uncertain. TKM37-307; Grif 15257. Collected 06/05/2002 in Turkmenistan. Latitude 38° 29' 25" N. Longitude 56° 6' 59" E. Elevation 934 m. Site No. 37.

The following were donated by J. Brad Morris, USDA, ARS, Plant Genetic Resources Conservation Unit, 1109 Experiment Street, Griffin, Georgia 30223-1797, United States. Received 04/12/2005.

PI 653615. *Lablab purpureus* (L.) Sweet
Uncertain. Lablab I. Surti Val, Swad, Raja Foods, Product of India, Stokie, IL.

The following were donated by D. M. Broadhead, U.S. Sugar Crops Field Station, Rt. 13 Box 14, Meridan, Mississippi 39301, United States. Received 1981.

PI 653616. *Sorghum bicolor* (L.) Moench subsp. *bicolor*

"WRAY"; MER. 69-13; NSL 117772. CV-119. Pedigree - Derived from F2 progeny of cross of selection from PI 152728 (Mer. 57-1) with Brawley x Rio. Info. from Crop Sci. 21(6):987 (1981) -- sucrose-type. Panicle effuse and inclined. Drooping rachis. Pubescence on black glumes semi-deciduous. Glumes sharp apex. Brown, ellipsoid-shaped seed. Medium to large size. Awnless lemma. Soft, chalky coat underlain by brown subcoat. Endosperm mostly starchy with medium-thick corneous layer. Coleoptile green. Resistant leaf anthracnose, maize dwarf mosaic virus, rust and stalk red rot. Susceptible downy mildew. Matures 105 - 130 days. Potential use alcohol production. Cultivated.

The following were developed by D. M. Broadhead, U.S. Sugar Crops Field Station, Rt. 13 Box 14, Meridan, Mississippi 39301, United States. Received 1982.

PI 653617. *Sorghum bicolor* (L.) Moench subsp. *bicolor*

"KELLER"; MER. 68-2; NSL 165819. CV-120. Pedigree - Derived from F2 progeny of cross Mer. 50-1 x Rio. Info. from Crop Sci. 22(6):1263 (1982) -- matures 105 - 130 days. Panicle effuse and inclined. Brown glumes cover kernels. Nonpersistent in threshed seed. Lemmas awnless. Spikelets strongly nerved. Persistently pedicelled. Greenish-to-tan. Extend beyond sessile spikelet. Panicle brown. Kernels medium size. Brown pigmented pericarp and testa. Ovate-elliptic shaped. Starchy endosperm. Medium-thick corneous layer. Green coleoptile. Resistant leaf anthracnose & stalk red rot. Susceptible rust, MDMV & methyl parathion. Cultivated.

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 653618. *Capsicum annuum* L.

15641; Grif 9168. Collected in Costa Rica.

PI 653619. *Capsicum annuum* L.

15657; Grif 9332. Collected in Costa Rica.

The following were developed by John R. Stommel, USDA, ARS, Genetic Improvement of Fruits, and Vegetables, Beltsville, Maryland 20705-2350, United States; Robert J. Griesbach, USDA, ARS, Florist and Nursery Crops Lab, Building 010A, BARC-West, Beltsville, Maryland 20705-2350, United States; Pan American Seed Company, 15861 Green Road, Elburn, Illinois, United States. Received 06/11/2003.

PI 653620. *Capsicum annuum* L.

Cultivar. "Tangerine Dream"; 02C175; Grif 15165. Pedigree - Derived from initial cross between the sweet hybrid bell pepper cv. Cadice and the open pollinated sweet squash type pepper cv. Tennessee Cheese. The ideotype was identified in the fifth generation of a population of segregating open pollinated field selections, subsequently selected for horticultural quality and stabilized under controlled pollination conditions prior to release at the twelfth generation. Released 04/22/2003. Prostrate growth habit and sweet non-pungent upright oriented conical fruit. Fruit are borne in clusters of three to four

fruit per cluster. Immature fruit are green pigmented and mature to orange-red in approximately 70 days. Fruit contain 2 to 3 locules and average 7.6 cm in length and 2.8 cm shoulder width. Average fruit pericarp thickness is 0.4 cm. Plants average 69.8 cm in diameter and 30.3 cm in height. Foliage is dark green. When grown as bedding plants has a spreading prostrate growth habit and brightly colored upright oriented fruit provide an attractive ornamental display. Sweet non-pungent fruit flavor contributes to culinary appeal.

The following were donated by Native Seeds/SEARCH, 526 N. 4th Avenue, Tucson, Arizona 85705, United States. Received 07/01/2003.

PI 653621. *Capsicum annuum* L.

Cultivated. Isleta; Grif 15235. From Isleta Pueblo (4,900'), first collected in 1993. An exceptionally tasty native NM chile. It has broader shoulders and is less fleshy than Isleta Long. Mild-medium. 4-5".

PI 653622. *Capsicum annuum* L.

Cultivated. Quatro Milpas; Grif 15244. Grown in the mountain village of Quatro Milpas, Sonora. Fleshy and smooth-skinned. Mild heat. 4-4.5".

PI 653623. *Capsicum annuum* L.

Cultivated. Negro de Valle; Grif 15249. First collected in 2000 north of Buenaventura, on the plains of Chihuahua. Similar to Vallero (D20) but contains only the darker, "native, old type" chile. Some cooks select only these dark brown chiles to make the best chile colorado. Medium heat. 6".

The following were donated by Asian Vegetable Research and Development Center, P.O. Box 42, Shanhua, Tainan, Taiwan. Received 01/25/1999.

PI 653624. *Capsicum annuum* L.

Cultivar. "Maor"; PBC 5; Grif 15259. Collected in Israel. Elong. bell type.

PI 653625. *Capsicum annuum* L.

Cultivar. "Czechoslovakian Black"; PBC 7; Grif 15261. Collected in Czech Republic. Cayenne type.

PI 653626. *Capsicum annuum* L.

Cultivar. "MC4-(32)"; PBC 32; Grif 15266. Collected in Malaysia. Cayenne type.

PI 653627. *Capsicum annuum* L.

Cultivar. "Erect Chilli Jalan Kel"; PBC 314; Grif 15380. Collected in Malaysia. Cayenne type.

PI 653628. *Capsicum annuum* L.

Cultivar. "C225A-2"; PBC 382; Grif 15412. Collected in Unknown. Piquin type.

PI 653629. *Capsicum annuum* L.

Cultivar. PBC 390; Grif 15419. Collected in Malaysia. Cayenne type.

- PI 653630. *Capsicum annuum* L.**
Cultivar. PBC 392; Grif 15421. Collected in Malaysia. Cayenne type.
- PI 653631. *Capsicum annuum* L.**
Cultivar. "Szechwan (VC)"; PBC 432; Grif 15444. Collected in Taiwan. Cayenne type.
- PI 653632. *Capsicum annuum* L.**
Cultivar. "All Season"; PBC 435; Grif 15445. Collected in Philippines. Conibell type.
- PI 653633. *Capsicum annuum* L.**
Cultivar. "KA-6-5"; PBC 461; Grif 15460. Collected in Sri Lanka. Cayenne type.
- PI 653634. *Capsicum annuum* L.**
Cultivar. "Bako Local"; PBC 463; Grif 15462. Collected in Ethiopia. Cayenne type.
- PI 653635. *Capsicum annuum* L.**
Cultivar. "BL-20"; PBC 481; Grif 15478. Collected in Sri Lanka. Cayenne type.
- PI 653636. *Capsicum annuum* L.**
Cultivar. "BL-44"; PBC 482; Grif 15479. Collected in Sri Lanka. Cayenne type.
- PI 653637. *Capsicum annuum* L.**
Cultivar. "KA-11"; PBC 484; Grif 15481. Collected in Sri Lanka. Cayenne type.
- PI 653638. *Capsicum annuum* L.**
Cultivar. "MI-1"; PBC 485; Grif 15482. Collected in Sri Lanka. Cayenne type.
- PI 653639. *Capsicum annuum* L.**
Cultivar. "PS-2"; PBC 487; Grif 15483. Collected in India. Cayenne type.
- PI 653640. *Capsicum annuum* L.**
Cultivar. "G-3"; PBC 548; Grif 15519. Collected in India. Cayenne type.
- PI 653641. *Capsicum annuum* L.**
Cultivar. "LSU Sport"; PBC 557; Grif 15527. Collected in United States. Cayenne type.
- PI 653642. *Capsicum annuum* L.**
Cultivar. "Cayenne 709-1"; PBC 563; Grif 15528. Collected in United States. Cayenne type.
- PI 653643. *Capsicum annuum* L.**
Cultivar. "Chillies Giant"; PBC 580; Grif 15537. Collected in Sri Lanka. Cayenne type.
- PI 653644. *Capsicum annuum* L.**
Cultivar. PBC 590; Grif 15547. Collected in Thailand. Cayenne type.

- PI 653645. *Capsicum annuum* L.**
Cultivar. "Yuak"; PBC 595; Grif 15552. Collected in Thailand. Wax type.
- PI 653646. *Capsicum annuum* L.**
Cultivar. "Kalmicho"; PBC 621; Grif 15564. Collected in Korea, South.
Cayenne type.
- PI 653647. *Capsicum annuum* L.**
Cultivar. "Suwon"; PBC 647; Grif 15578. Collected in Korea, South.
Cayenne type.
- PI 653648. *Capsicum annuum* L.**
Cultivar. "Chili Hybrid-1"; PBC 651; Grif 15581. Collected in India.
Cayenne type.
- PI 653649. *Capsicum annuum* L.**
Cultivar. "Jalapeno Chili"; PBC 652; Grif 15582. Collected in United
States. Jalapeno type.
- PI 653650. *Capsicum annuum* L.**
Cultivar. PBC 686; Grif 15597. Collected in Bangladesh. Cayenne type.
- PI 653651. *Capsicum annuum* L.**
Cultivar. "CNPB 90"; PBC 709; Grif 15602. Collected in Brazil. Conical
type.
- PI 653652. *Capsicum annuum* L.**
Cultivar. "G-4"; PBC 716; Grif 15605. Collected in India. Cayenne type.
- PI 653653. *Capsicum annuum* L.**
Cultivar. "Jalapeno landrace"; PBC 745; Grif 15616. Collected in Mexico.
Jalapeno type.
- PI 653654. *Capsicum annuum* L.**
Cultivar. "T 570/970"; PBC 753; Grif 15620. Collected in Hungary. Large
wax type.
- PI 653655. *Capsicum annuum* L.**
Cultivar. "T 98/967"; PBC 754; Grif 15621. Collected in Hungary.
Cayenne type.
- PI 653656. *Capsicum annuum* L.**
Cultivar. "U 155"; PBC755; Grif 15622. Collected in Hungary. Large wax
type.
- PI 653657. *Capsicum annuum* L.**
Cultivar. "TL 78/377"; PBC 764; Grif 15629. Collected in Hungary. Large
wax bean.
- PI 653658. *Capsicum annuum* L.**
Cultivar. "FLBG-1"; PBC 839; Grif 15664. Collected in United States.
Large wax type.
- PI 653659. *Capsicum annuum* L.**
Cultivar. "CAP 66/78"; PBC1381; Grif 15758. Collected in Germany.
Piquin type.

- PI 653660. *Capsicum annuum* L.**
Cultivar. "CO1757"; PBC1419; Grif 15769. Collected in Italy. Large wax type.
- PI 653661. *Capsicum annuum* L.**
Cultivar. "Pulla"; PBC1431; Grif 15773. Collected in Mexico. Pulla type.
- PI 653662. *Capsicum annuum* L.**
Cultivar. "Jingle Bells"; PBC1470; Grif 15802. Collected in United States. Minibell type.
- PI 653663. *Capsicum annuum* L.**
Cultivar. "Purple Beauty"; PBC1482; Grif 15807. Collected in United States. Bell type.
- PI 653664. *Capsicum annuum* L.**
Cultivar. "Red Spike"; PBC1486; Grif 15810. Collected in United States. Cayenne type.
- PI 653665. *Capsicum annuum* L.**
Cultivar. "Ring of Fire"; PBC1487; Grif 15811. Collected in United States. Cayenne type.
- PI 653666. *Capsicum annuum* L.**
Cultivar. "Ebano"; PBC1515; Grif 15826. Collected in United States. Jalapeno type.

The following were donated by Michael Mazourek, Cornell University, Molly Jahn Lab, 306 Bradfield Hall, Ithaca, New York 14853, United States; Matt Falise, Cornell University, Department of Plant Breeding, 252 Emerson Hall, Ithaca, New York 14853-1901, United States. Received 04/14/2005.

- PI 653667. *Capsicum annuum* L.**
Uncertain. 99I-64; Perennial; Grif 16051.

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 653668. *Capsicum baccatum* L.**
Peru-5419; Grif 9209. Collected in Costa Rica.
- PI 653669. *Capsicum baccatum* L.**
063; Grif 9221. Collected in Colombia.
- PI 653670. *Capsicum baccatum* var. *pendulum* (Willd.) Eshbaugh**
Peru-5391; Grif 9206. Collected in Costa Rica.
- PI 653671. *Capsicum chinense* Jacq.**
9922; Grif 9117. Collected in Costa Rica.
- PI 653672. *Capsicum chinense* Jacq.**
Peru-7209; Grif 9280. Collected in Costa Rica.

PI 653673. *Capsicum chinense* Jacq.
180-B; Grif 9302. Collected in Colombia.

PI 653674. *Capsicum chinense* Jacq.
216; Grif 9338. Collected in Colombia.

The following were donated by George H. Loewer, 7708 Braddock Avenue, Baltimore, Maryland 21224-3301, United States. Received 03/16/1995.

PI 653675. *Capsicum chinense* Jacq.
Grif 12450; Chocolate Congo.

The following were donated by Asian Vegetable Research and Development Center, P.O. Box 42, Shanhua, Tainan, Taiwan. Received 01/25/1999.

PI 653676. *Capsicum chinense* Jacq.
Cultivar. "AMA 6"; PBC 188; Grif 15855. Collected in Brazil.
Campanulate type.

PI 653677. *Capsicum chinense* Jacq.
Cultivar. "AMA 7"; PBC 189; Grif 15856. Collected in Brazil.
Campanulate type.

PI 653678. *Capsicum chinense* Jacq.
Cultivar. "AMA 8"; PBC 190; Grif 15857. Collected in Brazil.
Campanulate type.

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 653679. *Capsicum frutescens* L.
9839; Grif 9114. Collected in Costa Rica.

PI 653680. *Capsicum frutescens* L.
Peru-5487; Grif 9149. Collected in Costa Rica.

PI 653681. *Capsicum frutescens* L.
9838; Grif 9309. Collected in Costa Rica.

PI 653682. *Capsicum frutescens* L.
Peru-5491; Grif 9328. Collected in Costa Rica.

PI 653683. *Capsicum frutescens* L.
191-B; Grif 9337. Collected in Colombia.

The following were donated by Asian Vegetable Research and Development Center, P.O. Box 42, Shanhua, Tainan, Taiwan. Received 01/25/1999.

PI 653684. *Capsicum frutescens* L.
Cultivar. "U-Dantsiga"; PBC 406; Grif 15874. Collected in Nigeria.
Tabasco type.

The following were developed by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 04/28/2008.

PI 653685. *Agropyron cristatum* (L.) Gaertn.

Cultivar. Population. "HYCREST II". PVP 200800307; CV-31; REST 653685. Pedigree - The original parental germplasm of Hycrest II was generated by intercrossing ten induced tetraploids of Fairway crested wheatgrass (PI 279802). From 1976 to 1985, this induced tetraploid population under went four cycles of recurrent phenotypic selection for seedling vigor, seed yield, and visual plant vigor at Stone, ID, Blue Creek, Logan, and Nephi, UT. In 2003, 660 plants per entry (3,960 total plants) were spaced-planted in a completely randomized design near Logan, Utah and designated as breeder seed. Hycrest II crested wheatgrass (*Agropyron cristatum* L.) is intended for use on arid and semiarid rangelands as a rapid establishing revegetation grass in the Intermountain Region and Northern Great Plains of western U.S. Hycrest II was selected for improved seedling establishment under drought. Hycrest II has a narrower genetic based than cultivars Hycrest and CD-II and has been evaluated on rangeland sites in western U.S. for seedling establishment compared to commercially available cultivars Hycrest and CD-II. When planted at a rate of one pure live seed (PLS), Hycrest II had more seedlings per unit area (m²) during the establishment year than did the cultivar Hycrest at Blucreek, UT (76 vs 65%); Green Canyon, UT (78 vs 61%; P<0.05); Mandan, ND (78 vs 69%; P<0.05); Miles City, MT (85 vs 72%; P<0.05); Dugway, UT (35 vs 10%; P<0.05); and Curlew Valley, ID (72 vs 56%; P<0.05) (Fig. 1). At Dugway, UT, Hycrest II (35%) had significantly more seedlings per unit area than (13%) (Fig. 1). At Miles City, MT Hycrest II had significantly better seedling establishment than Nordan (Fig. 1). Due to Hycrest II increased seedling establishment potential, particularly under harsh dry environments, it is intended to replace the cultivar Hycrest for use on reseeding severely disturbed range sites on heavier soils receiving less than 300 mm of annual precipitation.

PI 653686. *Agropyron fragile* (Roth) P. Candargy

Cultivar. Population. "VAVILOV II". PVP 200800299; CV-30; REST 653686. Pedigree - The parent material for Vavilov II Siberian wheatgrass was the cultivar Vavilov and germplasm from Kazakhstan PIs 598664, 598665, 598666, 598667, 598668, 598689, 598690, 598691, 598692, 598693, 598694, 598696, 598697, 598698, 598714, and 598715. Vavilov II contains genetic material from 21 genotypes of Vavilov and eight genotypes from the above PIs, which were intercrossed before selection. The cultivar has undergone one cycle of selection for seedling establishment and persistence. Vavilov II Siberian wheatgrass (*Agropyron fragile* (Roth) Candargy) was developed for use on arid and semiarid rangelands as a rapid establishing revegetation grass in the Intermountain West, Great Basin, and Northern Great Plains Regions of western U.S.A. Vavilov II is a broad-based 50-clone synthetic selected for persistence and overall plant and seedling establishment in response to drought. During the establishment year, Vavilov II had significantly (P<0.05) higher numbers of seedlings per unit area (m²) using a frequency grid when planted at a rate of one pure live seed (PLS) cm⁻¹ at Yakima, WA (est. fall 2002; 52 vs 23%); Fillmore, UT (est. fall 2004; 79 vs 54%); Dugway, UT (est. fall 2005; 79 vs 52%); and Curlew Valley, ID (est. fall 2002; 70 vs 40%) (Fig. 2). Vavilov II was more persistence after establishment

(as measured by percent stand) Vavilov at Yakima, WA (68 vs 44%); Fillmore, UT (84 vs 62%); Curlew Valley, ID (69 vs 55%); and Malta, ID (97 vs 91%) (Fig. 3). Vavilov II germinated in seven days compared to 10 days on sandy loam, loam, and sandy soil types. At the Coffee Point test site, Vavilov II had the highest plant density of all accessions evaluated at 15.9 plants m⁻² compared to 8.0 plants m⁻² for Vavilov. On 7 September 2007 the second evaluation was completed, and Vavilov II had 15.7 plants m⁻² and Vavilov had 7.4 plants m⁻². Amplified fragment length polymorphisms (AFLP) were used to compare Vavilov II to Vavilov, P-27, and a breeding population Kazak Siberian wheatgrass. The six AFLP primer pairs amplified 728 bands that were present in more than 5% and less than 95% of the individuals. Across all four cultivars/populations, 88% of variation was within, while 12% was between. The most similar cultivars were Vavilov and Vavilov II. The significant variation among cultivars/populations allows for molecular markers that distinguish the varieties.

The following were donated by Gus Hesselmanns, Vitricom Holland bv, Broekpolderlaan 40, Honselersdijk, Netherlands. Received 10/17/2002.

PI 653687 PVPO. *Solanum tuberosum* L.
Cultivar. "Melody"; Q 43819. PVP 200300133.

The following were developed by Monsanto Technology L.L.C., Waterman, Illinois 60556, United States. Received 04/23/2008.

PI 653688 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "CV076785". PVP 200800202.

PI 653689 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "CV164272". PVP 200800203.

PI 653690 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "CV390455". PVP 200800204.

PI 653691 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "CV414351". PVP 200800205.

PI 653692 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "CV427371". PVP 200800206.

PI 653693 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "CV427441". PVP 200800207.

PI 653694 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "CV449242". PVP 200800208.

PI 653695 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "CV572727". PVP 200800209.

PI 653696 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "CV591539". PVP 200800210.

PI 653697 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "CV593904". PVP 200800211.

PI 653698 PVPO. Zea mays L. subsp. mays
Cultivar. "CV619952". PVP 200800212.

PI 653699 PVPO. Zea mays L. subsp. mays
Cultivar. "CV728154". PVP 200800213.

PI 653700 PVPO. Zea mays L. subsp. mays
Cultivar. "CV795034". PVP 200800214.

PI 653701 PVPO. Zea mays L. subsp. mays
Cultivar. "I112311". PVP 200800215.

PI 653702 PVPO. Zea mays L. subsp. mays
Cultivar. "I285290". PVP 200800216.

PI 653703 PVPO. Zea mays L. subsp. mays
Cultivar. "I286346". PVP 200800217.

PI 653704 PVPO. Zea mays L. subsp. mays
Cultivar. "I877879". PVP 200800218.

The following were donated by Fang, Nursery, SR-9 Mountain View, Mountain View, Hawaii 96771, United States. Received 12/01/1998.

PI 653705. Camellia sinensis (L.) Kuntze
Cultivated. Chin Sun Oolong; HCAM 10; N99-12.

The following were developed by Mildred Zapata, University of Puerto Rico, Crop Protection Dept., Mayaguez, Puerto Rico; James S. Beaver, University of Puerto Rico, Mayaguez Camp, Department of Agronomy & Soils, P. O. Box 9030, Mayaguez, Puerto Rico; Tim Porch, USDA, ARS, Tropical Agricultural Research Station, 2200 Pedro Albizu Campos Ave., Suite 201, Mayaguez, Puerto Rico. Received 04/30/2008.

PI 653706. Phaseolus vulgaris L.
Cultivar. Pureline. "VERANO". CV-282. Pedigree - DOR 364/WBB-20-1//Don Silvio/VAX 6. Verano has tolerance to high temperature and resistance to Bean golden yellow mosaic virus (BGYMV), a whitefly [Bemisia tabaci (Gennadius)]-transmitted begomovirus, Bean common mosaic virus (BCMV) and common bacterial blight [caused by Xanthomonas axonopodis pv. phaseoli (Smith) Dye]. Verano has an indeterminate, upright, Type III growth habit with a short vine. In Puerto Rico, Verano flowers 35 d and matures 74 d after planting. Verano has an ovoid white seed, averaging 22 g 100 seed⁻¹. The release and adoption of a high temperature tolerant cultivar such as Verano will improve yield and seed quality of green-shelled beans produced in Puerto Rico.

The following were developed by Kulvinder Gill, Washington State University, Crop and Soil Sciences, 277 Johnson Hall, Pullman, Washington 99164, United States. Received 05/01/2008.

PI 653707. Triticum aestivum L. subsp. aestivum
Breeding. Pureline. Harry/H13. Pedigree - Molly/*5 Harry. Harry/H13 is

an isogenic line carrying Hessian fly resistant gene H13. The H13 gene was transferred from *Aegilops tauschii* (Coss.) Schmal. into hexaploid wheat via direct crosses. The gene is located on chromosome arm 6DS. Plants carrying H13 gene can be identified using biotype L. At the end of the backcrossing cycles, plants homozygous for H13 were selected using a co-dominant DNA marker Xgdm36 followed by phenotypic screening of F3 progeny using biotype L. Morphologically the germplasm looked very similar to its recurrent parent (Harry) and no significant differences were observed for height or days to flowering.

PI 653708. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. Wahoo/H13. Pedigree - Molly/*5 Wahoo. Wahoo/H13 is an isogenic line carrying Hessian fly resistant gene H13. The H13 gene was transferred from *Aegilops tauschii* (Coss.) Schmal. into hexaploid wheat via direct crosses. The gene is located on chromosome arm 6DS. Plants carrying H13 gene can be identified using biotype L. At the end of the backcrossing cycles, plants homozygous for H13 were selected using a co-dominant DNA marker Xgdm36 followed by phenotypic screening of F3 progeny using biotype L. Morphologically the germplasm looked very similar to its recurrent parent (Wahoo) and no significant differences were observed for height or days to flowering.

PI 653709. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. Wesley/H13. Pedigree - Molly/*5 Wesley. Wesley/H13 is an isogenic line carrying Hessian fly resistant gene H13. The H13 gene was transferred from *Aegilops tauschii* (Coss.) Schmal. into hexaploid wheat via direct crosses. The gene is located on chromosome arm 6DS. Plants carrying H13 gene can be identified using biotype L. At the end of the backcrossing cycles, plants homozygous for H13 were selected using a co-dominant DNA marker Xgdm36 followed by phenotypic screening of F3 progeny using biotype L. Morphologically the germplasm looked very similar to its recurrent parent (Wesley) and no significant differences were observed for height or days to flowering.

PI 653710. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. Alliance/Wsm1. Pedigree - KS93WGRC27/*5 Alliance. Alliance/Wsm1 is a near-isogenic line carrying wheat streak mosaic virus resistant gene Wsm1. The Wsm1 gene donor was a hard red winter wheat line KS93WGRC27 (PI 583794) that carries the gene on an Agropyron intermedium (Host) P. Beauv. segment translocated to wheat chromosome 4DS. This line was backcrossed five times to Wahoo followed by subsequent selfing. Beginning with the BC1 generation, the sequence-tagged-site (STS) marker STSJ15 that is specific for the translocated segment carrying Wsm1 gene, was used to select resistant plants. At the end of the backcrossing cycles, selfed progeny of each of the BC4F2 plants were screened with the marker in order to select BC4F2 homozygous for the gene. The resistance in the selected plants was confirmed by phenotypic screening of F3 progeny using Sidney 81 strain. Morphologically the germplasm looked very similar to its recurrent parent (Alliance) and no significant differences were observed for height or days to flowering.

PI 653711. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. Arrowsmith/Wsm1. Pedigree - KS93WGRC27/*5 Arrowsmith. Arrowsmith/Wsm1 is a near-isogenic line carrying wheat streak mosaic virus resistant gene Wsm1. The Wsm1 gene donor was a hard red winter wheat line KS93WGRC27 (PI 583794) that carries the gene on an

Agropyron intermedium (Host) P. Beauv. segment translocated to wheat chromosome 4DS. This line was backcrossed five times to Wahoo followed by subsequent selfing. Beginning with the BC1 generation, the sequence-tagged-site (STS) marker STSJ15 that is specific for the translocated segment carrying Wsm1 gene, was used to select resistant plants. At the end of the backcrossing cycles, selfed progeny of each of the BC4F2 plants were screened with the marker in order to select BC4F2 homozygous for the gene. The resistance in the selected plants was confirmed by phenotypic screening of F3 progeny using Sidney 81 strain. Morphologically the germplasm looked very similar to its recurrent parent (Arrowsmith) and no significant differences were observed for height or days to flowering.

PI 653712. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. Goodstreak/Wsm1. Pedigree - KS93WGRC27/*5 Goodstreak. Goodstreak/Wsm1 is a near-isogenic line carrying wheat streak mosaic virus resistant gene Wsm1. The Wsm1 gene donor was a hard red winter wheat line KS93WGRC27 (PI 583794) that carries the gene on an Agropyron intermedium (Host) P. Beauv. segment translocated to wheat chromosome 4DS. This line was backcrossed five times to Wahoo followed by subsequent selfing. Beginning with the BC1 generation, the sequence-tagged-site (STS) marker STSJ15 that is specific for the translocated segment carrying Wsm1 gene, was used to select resistant plants. At the end of the backcrossing cycles, selfed progeny of each of the BC4F2 plants were screened with the marker in order to select BC4F2 homozygous for the gene. The resistance in the selected plants was confirmed by phenotypic screening of F3 progeny using Sidney 81 strain. Morphologically the germplasm looked very similar to its recurrent parent (Goodstreak) and no significant differences were observed for height or days to flowering.

PI 653713. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. Harry/Wsm1. Pedigree - KS93WGRC27/*5 Harry. Harry/Wsm1 is a near-isogenic line carrying wheat streak mosaic virus resistant gene Wsm1. The Wsm1 gene donor was a hard red winter wheat line KS93WGRC27 (PI 583794) that carries the gene on an Agropyron intermedium (Host) P. Beauv. segment translocated to wheat chromosome 4DS. This line was backcrossed five times to Wahoo followed by subsequent selfing. Beginning with the BC1 generation, the sequence-tagged-site (STS) marker STSJ15 that is specific for the translocated segment carrying Wsm1 gene, was used to select resistant plants. At the end of the backcrossing cycles, selfed progeny of each of the BC4F2 plants were screened with the marker in order to select BC4F2 homozygous for the gene. The resistance in the selected plants was confirmed by phenotypic screening of F3 progeny using Sidney 81 strain. Morphologically the germplasm looked very similar to its recurrent parent (Harry) and no significant differences were observed for height or days to flowering.

PI 653714. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. Millennium/Wsm1. Pedigree - KS93WGRC27/*5 Millennium. Harry/Wsm1 is a near-isogenic line carrying wheat streak mosaic virus resistant gene Wsm1. The Wsm1 gene donor was a hard red winter wheat line KS93WGRC27 (PI 583794) that carries the gene on an Agropyron intermedium (Host) P. Beauv. segment translocated to wheat chromosome 4DS. This line was backcrossed five times to Wahoo followed by subsequent selfing. Beginning with the BC1 generation, the

sequence-tagged-site (STS) marker STSJ15 that is specific for the translocated segment carrying Wsm1 gene, was used to select resistant plants. At the end of the backcrossing cycles, selfed progeny of each of the BC4F2 plants were screened with the marker in order to select BC4F2 homozygous for the gene. The resistance in the selected plants was confirmed by phenotypic screening of F3 progeny using Sidney 81 strain. Morphologically the germplasm looked very similar to its recurrent parent (Harry) and no significant differences were observed for height or days to flowering.

PI 653715. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. Wahoo/Wsm1. Pedigree - KS93WGRC27/*5 Wahoo. Wahoo/Wsm1 is a near-isogenic line carrying wheat streak mosaic virus resistant gene Wsm1. The Wsm1 gene donor was a hard red winter wheat line KS93WGRC27 (PI 583794) that carries the gene on an Agropyron intermedium (Host) P. Beauv. segment translocated to wheat chromosome 4DS. This line was backcrossed five times to Wahoo followed by subsequent selfing. Beginning with the BC1 generation, the sequence-tagged-site(STS) marker STSJ15 that is specific for the translocated segment carrying Wsm1 gene, was used to select resistant plants. At the end of the backcrossing cycles, selfed progeny of each of the BC4F2 plants were screened with the marker in order to select BC4F2 homozygous for the gene. The resistance in the selected plants was confirmed by phenotypic screening of F3 progeny using Sidney 81 strain. Morphologically the germplasm looked very similar to its recurrent parent (Wahoo) and no significant differences were observed for height or days to flowering.

PI 653716. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. Wesley/Wsm1. Pedigree - KS93WGRC27/*5 Wesley. Wesley/Wsm1 is a near-isogenic line carrying wheat streak mosaic virus resistant gene Wsm1. The Wsm1 gene donor was a hard red winter wheat line KS93WGRC27(PI 583794) that carries the gene on an Agropyron intermedium (Host) P. Beauv. segment translocated to wheat chromosome 4DS. This line was backcrossed five times to Wahoo followed by subsequent selfing. Beginning with the BC1 generation, the sequence-tagged-site (STS) marker STSJ15 that is specific for the translocated segment carrying Wsm1 gene, was used to select resistant plants. At the end of the backcrossing cycles, selfed progeny of each of the BC4F2 plants were screened with the marker in order to select BC4F2 homozygous for the gene. The resistance in the selected plants was confirmed by phenotypic screening of F3 progeny using Sidney 81 strain. Morphologically the germplasm looked very similar to its recurrent parent (Wesley) and no significant differences were observed for height or days to flowering.

The following were developed by Florida Agr. Exp. Sta., Florida, United States. Received 04/21/2008.

PI 653717 PVPO. *Arachis hypogaea* L.

Cultivar. "YORK". PVP 200800186.

The following were developed by Cotton Seed Int'l. Proprietary Limited, Leland, Mississippi, United States. Received 04/22/2008.

PI 653718 PVPO. *Gossypium hirsutum* L.
Cultivar. "FM1740B2F". PVP 200800163.

PI 653719 PVPO. *Gossypium hirsutum* L.
Cultivar. "FM840B2F". PVP 200800164.

PI 653720 PVPO. *Gossypium hirsutum* L.
Cultivar. "FM820F". PVP 200800165.

The following were developed by Syngenta Seeds, Inc., Nampa, Idaho, United States. Received 04/25/2008.

PI 653721 PVPO. *Phaseolus vulgaris* L.
Cultivar. "ROCKPORT". PVP 200800195.

The following were developed by Progene Plant Research, Othello, Washington, United States. Received 04/30/2008.

PI 653722 PVPO. *Pisum sativum* L.
Cultivar. "BANNER". PVP 200800189.

The following were developed by Texas AgriLifeResearch, Texas, United States. Received 04/30/2008.

PI 653723 PVPO. *Capsicum annuum* L.
Cultivar. "TAM Mild Jalapeno II". PVP 200800190.

The following were developed by Enza Zaden Beheer B.V., Netherlands. Received 04/30/2008.

PI 653724 PVPO. *Lactuca sativa* L.
Cultivar. "FLINT". PVP 200800191.

PI 653725 PVPO. *Lactuca sativa* L.
Cultivar. "BIXBY". PVP 200800192.

The following were developed by Trigen Seed LLC, Minnesota, United States. Received 04/30/2008.

PI 653726 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "HAT TRICK"; 05M SP5. PVP 200800196. Pedigree - Rubi/Prointa Real. Hard red spring wheat.

The following were developed by J.R. Simplot Company, United States. Received 04/30/2008.

PI 653727 PVPO. *Poa pratensis* L.
Cultivar. "SUDDEN IMPACT". PVP 200800197.

PI 653728 PVPO. *Poa pratensis* L.
Cultivar. "RUSH". PVP 200800198.

PI 653729 PVPO. *Poa pratensis* L.
Cultivar. "GRANITE". PVP 200800200.

PI 653730 PVPO. *Poa pratensis* L.
Cultivar. "4-SEASON". PVP 200800201.

The following were developed by Virginia Tech, Blacksburg, Virginia, United States. Received 04/30/2008.

PI 653731 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. "JAMESTOWN". PVP 200800219. Pedigree - Roane/Pioneer Brand 2691.

The following were developed by DLF International Seeds, Inc., United States. Received 04/30/2008.

PI 653732 PVPO. *Festuca rubra* L. subsp. *rubra*
Cultivar. "CARDINAL". PVP 200800220.

The following were developed by Texas Agricultural Experiment Station, Texas, United States. Received 05/14/2008.

PI 653733 PVPO. *Solanum tuberosum* L.
Cultivar. "RUSSET NORKOTAH 296". PVP 200300288.

The following were donated by R.P. Celarier, Oklahoma A&M College, Stillwater, Oklahoma, United States. Received 1983.

PI 653734. *Sorghum bicolor* subsp. *drummondii* (Steud.) de Wet ex Davidse
Uncertain. A-6115; MN 4313; Grif 16331. Collected in Sudan.

The following were collected by R.P. Celarier, Oklahoma A&M College, Stillwater, Oklahoma, United States. Donated by USDA, ARS, U.S. Sugarcane Field Station, Meridian, Mississippi, United States. Received 1983.

PI 653735. *Sorghum bicolor* subsp. *verticilliflorum* (Steud.) de Wet ex Wiersema & J. Dahlb.
Uncertain. MN 4114; Grif 16296. Collected in Natal, South Africa.

The following were donated by USDA, ARS, U.S. Sugarcane Field Station, Meridian, Mississippi, United States. Received 1983.

PI 653736. *Sorghum* hybrid
Uncertain. MN 4598; Grif 16364. Forage type sugarcane.

The following were donated by R.P. Celarier, Oklahoma A&M College, Stillwater, Oklahoma, United States. Received 1983.

PI 653737. *Sorghum propinquum* (Kunth) Hitchc.
Uncertain. A-5740; MN 4254; Grif 16322.

PI 653738. *Sorghum* sp.
Uncertain. A-4856; MN 4191; Grif 16314. Collected in Myanmar.

PI 653739. *Sorghum* sp.
Uncertain. A-6134; MN 4332; Grif 16338.

PI 653740. *Sorghum x alnum* Parodi
Uncertain. A-7772; MN 4456; Grif 16355. Collected in New Zealand.

The following were developed by Robert L. Jarret, USDA, ARS, Plant Genetic Resources Conservation Unit, University of Georgia, Griffin, Georgia 30223-1797, United States. Received 01/29/2008.

PI 653741. *Capsicum chinense* Jacq.
Uncertain. 61A. Pedigree - Selection from PI 441613.

PI 653742. *Capsicum chinense* Jacq.
Uncertain. 61B. Pedigree - Selection from PI 441613.

PI 653743. *Capsicum chinense* Jacq.
Uncertain. 63A. Pedigree - Selection from PI 441618.

PI 653744. *Capsicum chinense* Jacq.
Uncertain. 63B. Pedigree - Selection from PI 441618.

PI 653745. *Capsicum chinense* Jacq.
Uncertain. 63C. Pedigree - Selection from PI 441618.

PI 653746. *Capsicum chinense* Jacq.
Uncertain. 64A. Pedigree - Selection from PI 441621.

PI 653747. *Capsicum chinense* Jacq.
Uncertain. 64B. Pedigree - Selection from PI 441621.

PI 653748. *Capsicum chinense* Jacq.
Uncertain. 71A. Pedigree - Selection from PI 497975.

PI 653749. *Capsicum chinense* Jacq.
Uncertain. 71B. Pedigree - Selection from PI 497975.

The following were developed by USDA, NRCS, Elsberry Plant Materials Center, 2803 North Highway 79, Elsberry, Missouri 63343, United States. Received 09/23/2005.

PI 653750. *Lespedeza capitata* Michx.
Cultivar. "Northern Iowa Germplasm"; 9062281; SG0-01-F1 Z1. Pedigree - Originated from locations in the Northern counties in the state of Iowa. Released 2000. North, Central and Southern Iowa Germplasm Roundhead *Lespedeza*, Zones 1, 2 and 3 are tall native warm season perennial legumes that grows 3.5 to 4.0 feet high. The entire plant is covered with fine silvery hairs. The leaves occur alternately along the erect stems. They have three leaflets of medium to narrow elliptic shape. The

flowers are creamy white and bloom August through September. The flower heads are found growing close to the erect stems and are mostly near the top of the stems. Roundhead lespedeza responds as a decreaser to grazing pressure or repeated, close defoliation. It is compatible with warm-season grasses when well established. There is moderate to strong tolerance to burning when dormant. This plant grows naturally in diverse habitats such as dry prairie, open woodland soils, well-drained or sandy prairies in all but the northern portions of the tallgrass region, becoming uncommon north of Iowa. Roundhead lespedeza is moderately drought tolerant and winter hardy with some tolerance to shade. It performs best in areas receiving at least 20 inches of precipitation but will survive in moisture accumulating sites in semiarid zones. The area of adaptation for the Iowa Germplasm Roundhead Lespedeza Zones 1, 2 and 3 includes all counties located in the state of Iowa and adjacent states.

PI 653751. *Lespedeza capitata* Michx.

Cultivar. "Central Iowa Germplasm"; 9062282; SG1-02-F3 Z2. Pedigree - Originated from locations in the Central counties in the state of Iowa. Released 1996. North, Central and Southern Iowa Germplasm Roundhead Lespedeza, Zones 1, 2 and 3 are tall native warm season perennial legumes that grows 3.5 to 4.0 feet high. The entire plant is covered with fine silvery hairs. The leaves occur alternately along the erect stems. They have three leaflets of medium to narrow elliptic shape. The flowers are creamy white and bloom August through September. The flower heads are found growing close to the erect stems and are mostly near the top of the stems. Roundhead lespedeza responds as a decreaser to grazing pressure or repeated, close defoliation. It is compatible with warm-season grasses when well established. There is moderate to strong tolerance to burning when dormant. This plant grows naturally in diverse habitats such as dry prairie, open woodland soils, well-drained or sandy prairies in all but the northern portions of the tallgrass region, becoming uncommon north of Iowa. Roundhead lespedeza is moderately drought tolerant and winter hardy with some tolerance to shade. It performs best in areas receiving at least 20 inches of precipitation but will survive in moisture accumulating sites in semiarid zones. The area of adaptation for the Iowa Germplasm Roundhead Lespedeza Zones 1, 2 and 3 includes all counties located in the state of Iowa and adjacent states.

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 07/03/2001.

PI 653752. *Cymbopogon distans* (Nees ex Steud.) Will. Watson

Uncertain. TP00-29-100; Grif 16498. Collected 08/31/2000 in Xizang, China. Latitude 31° 4' 34" N. Longitude 101° 52' 29" E. Elevation 2020 m. 19 km N of Danba, Sichuan Province. Road plain terrace above Junchuan River, moist, sandy. Soil: cobbly gravel sand; Slope:1-2%; Aspect: SE.

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 Tecnologia Agropecuaria), Calle Man Cesped 923, Cochabamba, Cochabamba, Bolivia. Donated by Roel Hoekstra, Center for Plant Breeding and Reproduction Research, Center for Genetic Resources The Netherlands (CGN), Droevendaalsesteeg 1,, Wageningen, Gelderland 6700 AA, Netherlands. Received 12/04/2001.

PI 653753. *Solanum berthaultii* Hawkes

Wild. VSUG 610; BGRC 63028; Q 43670. Collected 01/13/1994 in Chuquisaca, Bolivia. Latitude 17° 52' 45" S. Longitude 65° 22' 52" W. Elevation 2400 m. Mizque: 12 km north of Mizque on road to Cochabamba, 1:250,000-scale map SE 20-5. growing among rocks in narrow ravine. Corolla white, stellate, fruits round.

PI 653754. *Solanum berthaultii* Hawkes

Wild. VSUG 619; BGRC 63036; Q 43672. Collected 01/14/1994 in Chuquisaca, Bolivia. Latitude 18° 17' 46" S. Longitude 65° 15' 12" W. Elevation 2210 m. Campero: from 16 km south of town square of Aiquile, drive west, across river, to town of Pabellon Mayu, then walk south, up stream, for 0.5 km, 1:250,000-scale map SE 19-9. growing on steep rocky slope. Corolla white, fruits round.

PI 653755. *Solanum x doddsii* Correll

Wild. VSUG 644; BGRC 63055; Q 43679. Collected 01/23/1994 in Santa Cruz, Bolivia. Latitude 18° 28' 48" S. Longitude 64° 4' 40" W. Elevation 2100 m. Valle Grande: 3.9 km east of town square of Valle Grande on road to Canton Poster Valle, on Ca#ada de Arteaga, then 300 m south across field to area near small artificial pond, 1:250,000-scale map SE 20-10. growing in organic soil in shade of trees by clearing. Corollas varying in color from white to light blue, fruits not yet formed.

PI 653756. *Solanum chacoense* Bitter

Wild. VSUG 645; BGRC 63056; Q 43680. Collected 01/24/1994 in Santa Cruz, Bolivia. Latitude 18° 20' 49" S. Longitude 64° 9' 33" W. Elevation 1750 m. Valle Grande: 19.1 km north of large statue of Christ on north side of Valle Grande on road to Matarral (3 km south of road to Ariruma), then 300 m east along fencerow, 1:250,000-scale map SE 20-10. growing in deep sandy irrigated soils along fencerow between two large cornfields, and in cornfields. Corollas stellate, varying in color from white to light blue, fruits round, verrucose.

PI 653757. *Solanum yungasense* Hawkes

Wild. VSUG 648; BGRC 63059; Q 43681. Collected 02/11/1994 in La Paz, Bolivia. Latitude 16° 16' S. Longitude 67° 43' W. Elevation 1700 m. Nor Yungas: 8 km south of Yolosa on road to San Juan, 1:250,000-scale map SE 19-3. growing between dense bushes along roadside. Flowers just in bud, corolla white.

PI 653758. *Solanum brevicaulle* Bitter

Wild. VSUG 656; BGRC 63065; Q 43683. Collected 02/23/1994 in La Paz, Bolivia. Latitude 15° 46' S. Longitude 68° 38' W. Elevation 2700 m. Larecaja, at San Pedro, a place 8 km from a road junction beginning 2 km from town square of Sorat on road to Larecaja, 1:250,000-scale map SD 19-15. growing in cornfield. Corolla blue, rotate-pentagonal, fruits round.

PI 653759. *Solanum yungasense* Hawkes

Wild. SFVU 6732; BGRC 20677; Q 43687; WRF 3630 - 602471 x 653759. Collected 03/19/1993 in La Paz, Bolivia. Latitude 16° 24' S. Longitude 67° 38' W. Elevation 1300 m. Nor Yungas: 2 km upstream of Rio Taquesi, from small bridge over river on main road (by the curve) in Puente Villa, in small plantation by house, 1:250,000-scale map SE 19-3. growing under small trees in plantation, among grasses. Plants young, without flowers or fruits, but worker of field said plants much more common earlier in January and February, tubers collected.

The following were donated by Haktae Lim, Kangwon National University, Division of Applied Plant Sciences, College of Agriculture and Life Sciences, Chuncheon, Korea, South. Received 11/05/2003.

PI 653760. *Solanum tuberosum* L.

Cultivar. "Rose Valley"; Q 44061. Red skin and orange flesh; round table stock; good chip color; high specific gravity; good cooking quality; marketable yield.

The following were donated by Enrique Chujoy, International Potato Center (CIP), Far East and SE Asia Regional Office, Laguna, Los Banos, Luzon, Philippines. Received 08/24/2005.

PI 653761. *Solanum tuberosum* subsp. *andigenum* (Juz. & Bukasov) Hawkes

Landrace. "Yana Hualash"; CIP 700806; Q 44468. Collected in Junin, Peru.

The following were donated by Stepan Kiru, N.I. Vavilov Institute of Plant Industry, Department of Tuber Crops, 44 Herzen Street, St. Petersburg, Leningrad 190000, Russian Federation. Received 08/01/2000.

PI 653762. *Solanum demissum* Lindl.

Wild. VIR 02353; Q 45086. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).

PI 653763. *Solanum stoloniferum* Schltdl. & Bouche

Wild. VIR 02534; Q 45087. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).

PI 653764. *Solanum stoloniferum* Schltdl. & Bouche

Wild. VIR 02536; Q 45088. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).

- PI 653765. *Solanum chacoense* Bitter**
Wild. VIR 02722; Q 45089. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653766. *Solanum chacoense* Bitter**
Wild. VIR 02731; Q 45090. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653767. *Solanum chacoense* Bitter**
Wild. VIR 02914; Q 45091. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653768. *Solanum chacoense* Bitter**
Wild. VIR 02917; Q 45092. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653769. *Solanum chacoense* Bitter**
Wild. VIR 02926; Q 45093. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653770. *Solanum demissum* Lindl.**
Wild. VIR 03287; Q 45094. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653771. *Solanum stoloniferum* Schltdl. & Bouche**
Wild. VIR 03326; Q 45095. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653772. *Solanum demissum* Lindl.**
Wild. VIR 03341; Q 45096. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653773. *Solanum demissum* Lindl.**
Wild. VIR 03342; Q 45097. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653774. *Solanum demissum* Lindl.**
Wild. VIR 03355; Q 45098. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653775. *Solanum stoloniferum* Schltdl. & Bouche**
Wild. VIR 03360; Q 45099. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653776. *Solanum demissum* Lindl.**
Wild. VIR 03362; Q 45100. VIR genebank accessions that were rescued

- (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653777. *Solanum stoloniferum* Schltdl. & Bouche**
Wild. VIR 03527; Q 45101. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653778. *Solanum stoloniferum* Schltdl. & Bouche**
Wild. VIR 03533; Q 45102. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653779. *Solanum demissum* Lindl.**
Wild. VIR 03540; Q 45103. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653780. *Solanum stoloniferum* Schltdl. & Bouche**
Wild. VIR 03554; Q 45104. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653781. *Solanum chacoense* Bitter**
Wild. VIR 03674; Q 45105. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653782. *Solanum chacoense* Bitter**
Wild. VIR 03678; Q 45106. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653783. *Solanum chacoense* Bitter**
Wild. VIR 03702; Q 45107. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653784. *Solanum verrucosum* Schltdl.**
Wild. VIR 04220; Q 45108. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653785. *Solanum chacoense* Bitter**
Wild. VIR 04236; Q 45109. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653786. *Solanum acaule* Bitter f. *acaule***
Wild. VIR 04250; Q 45110. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653787. *Solanum acaule* Bitter f. *acaule***
Wild. VIR 04253; Q 45111. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).

- PI 653788. *Solanum acaule* Bitter f. *acaule***
Wild. VIR 04263; Q 45112. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653789. *Solanum demissum* Lindl.**
Wild. VIR 04445; Q 45113. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653790. *Solanum pinnatisectum* Dunal**
Wild. VIR 04455; Q 45114. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653791. *Solanum pinnatisectum* Dunal**
Wild. VIR 04459; Q 45115. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653792. *Solanum chacoense* Bitter**
Wild. VIR 05257; Q 45116. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653793. *Solanum stoloniferum* Schltdl. & Bouche**
Wild. VIR 05347; Q 45117. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653794. *Solanum stoloniferum* Schltdl. & Bouche**
Wild. VIR 05431; Q 45118. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653795. *Solanum stoloniferum* Schltdl. & Bouche**
Wild. VIR 05671; Q 45119. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653796. *Solanum stoloniferum* Schltdl. & Bouche**
Wild. VIR 05682; Q 45120. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653797. *Solanum stoloniferum* Schltdl. & Bouche**
Wild. VIR 05747; Q 45121. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653798. *Solanum stoloniferum* Schltdl. & Bouche**
Wild. VIR 05751; Q 45122. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).

- PI 653799. *Solanum x michoacanum*** (Bitter) Rydb.
Wild. VIR 05763; Q 45123. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653800. *Solanum leptophyes*** Bitter
Wild. VIR 05764; Q 45124. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653801. *Solanum berthaultii*** Hawkes
Wild. VIR 07635; Q 45125. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653802. *Solanum berthaultii*** Hawkes
Wild. VIR 07642; Q 45126. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653803. *Solanum demissum*** Lindl.
Wild. VIR 08446; Q 45127. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653804. *Solanum demissum*** Lindl.
Wild. VIR 08462; Q 45128. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653805. *Solanum demissum*** Lindl.
Wild. VIR 08466; Q 45129. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653806. *Solanum stoloniferum*** Schltdl. & Bouche
Wild. VIR 08815; Q 45130. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653807. *Solanum stoloniferum*** Schltdl. & Bouche
Wild. VIR 08816; Q 45131. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653808. *Solanum pinnatisectum*** Dunal
Wild. VIR 09174; Q 45132. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653809. *Solanum brevicaulis*** Bitter
Wild. VIR 09705; Q 45133. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653810. *Solanum microdontum*** Bitter
Wild. VIR 09726; Q 45135. VIR genebank accessions that were rescued

(seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).

PI 653811. *Solanum spegazzinii* Bitter

Wild. VIR 09746; Q 45136. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).

PI 653812. *Solanum acaule* Bitter *f. acaule*

Wild. VIR 09784; Q 45137. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).

PI 653813. *Solanum acaule* Bitter *f. acaule*

Wild. VIR 09787; Q 45138. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).

PI 653814. *Solanum acaule* Bitter *f. acaule*

Wild. VIR 09789; Q 45139. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).

PI 653815. *Solanum acaule* Bitter *f. acaule*

Wild. VIR 09794; Q 45140. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).

PI 653816. *Solanum acaule* Bitter *f. acaule*

Wild. VIR 09795; Q 45141. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).

PI 653817. *Solanum sparsipilum* (Bitter) Juz. & Bukasov

Wild. VIR 09798; Q 45142. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).

PI 653818. *Solanum sparsipilum* (Bitter) Juz. & Bukasov

Wild. VIR 09808; Q 45143. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).

PI 653819. *Solanum verrucosum* Schltdl.

Wild. VIR 10556; Q 45144. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).

PI 653820. *Solanum acaule* Bitter *f. acaule*

Wild. VIR 10678; Q 45145. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).

PI 653821. *Solanum acaule* Bitter *f. acaule*

Wild. VIR 10679; Q 45146. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).

- PI 653822. *Solanum chacoense*** Bitter
Wild. VIR 15994; Q 45147. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653823. *Solanum stoloniferum*** Schltldl. & Bouche
Wild. VIR 16888; Q 45148. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653824. *Solanum stoloniferum*** Schltldl. & Bouche
Wild. VIR 17454; Q 45149. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653825. *Solanum acaule*** Bitter **f. *acaule***
Wild. VIR 18010; Q 45150. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653826. *Solanum acaule*** Bitter **f. *acaule***
Wild. VIR 18014; Q 45151. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653827. *Solanum acaule*** Bitter **f. *acaule***
Wild. VIR 18021; Q 45152. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653828. *Solanum guerreroense*** Correll
Wild. VIR 18407; Q 45153. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).
- PI 653829. *Solanum berthaultii*** Hawkes
Wild. VIR 23047; Q 45155. VIR genebank accessions that were rescued (seed increased) under a special cooperative USDA/FAS project in Poland (coordinated by Chuck Brown).

The following were donated by Shelley Jansky, University of Wisconsin, Department of Horticulture, 1575 Linden Drive, Madison, Wisconsin 53706, United States. Received 04/17/2007.

- PI 653830. *Solanum tuberosum*** L.
Genetic. HERM 18; TEMP 11. Good haploid inducer.
- PI 653831. *Solanum tuberosum*** L.
Genetic. GM 12; TEMP 12. Good haploid inducer.

The following were developed by P. Stephen Baenziger, University of Nebraska, Department of Agronomy, 362D Plant Science Bldg., Lincoln, Nebraska 68583-0915, United States. Received 05/09/2008.

PI 653832. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "CAMELOT"; NE01604; NSGC 18896. Pedigree - KS91H184/Arlin sib//KS91HW29/3/NE91631/4/VBF0168. Hard red winter wheat. Released primarily for its superior adaptation to rainfed wheat production systems in Nebraska and adjacent areas in the northern Great Plains.

PI 653833. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "NH03614 CL"; NSGC 18897. Pedigree - Wesley sib//Millennium sib/Above sib. Hard red winter wheat. Contains a patented gene owned by BASF.

The following were collected by Raul Castillo, Instituto Nacional de Investigaciones Agropecuarias, Departamento de Recursos, Fitogeneticos, Estacion Experimental, Quito, Pichincha, Ecuador; 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 Recursos Fitogeneticos Y Biotecnolog, Estacion Experimental Sta. Catalina, Santa Catalina, Pichincha, Ecuador; 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 11/17/1995.

PI 653834. *Arachis hypogaea* subsp. *fastigiata* Waldron

Landrace. WWT-1319; mani; Grif 12516. Collected 10/22/1995 in Sucumbios, Ecuador. Latitude 0° 1' 55" N. Longitude 77° 19' 20" W. Elevation 578 m. Canton Gonzalo Pizarro, Parroquia Lumbaqui, Localidad Lumbaqui. House of farmer. Fruits with marked reticulation, humps, beak, containing 3 purple seed.

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 Recursos Fitogeneticos Y Biotecnolog, Estacion Experimental Sta. Catalina, Santa Catalina, Pichincha, Ecuador; 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 11/17/1995.

PI 653835. *Arachis hypogaea* subsp. *fastigiata* Waldron

Landrace. WWT-1352; mani; Grif 12566. Collected 10/31/1995 in Ecuador. Latitude 3° 37' 49" S. Longitude 78° 35' 23" W. Elevation 885 m. Prov. Zamora Chinchipe, Canton El Pangui, Parroquia El Pangui, Localidad El Pangui. Store. Pedigree - Selection from Grif 12564 based on seed coat color. Seed tannish-purple.

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 Recursos Fitogeneticos Y Biotecnolog, Estacion Experimental Sta. Catalina, Santa Catalina, Pichincha, Ecuador. Received 10/07/1996.

PI 653836. *Arachis hypogaea* subsp. *fastigiata* Waldron

Landrace. WTS-44; mani; Grif 13825. Collected 08/28/1996 in Manabi, Ecuador. Latitude 0° 20' 20" S. Longitude 79° 45' 29" W. Elevation 590 m. Canton Flavio Alfaro, Localidad La Cresta. Store. Seeds tan, size small to medium.

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; Eriberto Mendoza, INIAP, Estacion Experimental Portoviejo, Km. 12 via Portoviejo, Santa Ana, Manabi, Ecuador; Cesar Tapia, Instituto Nacional Autonomo de Investigaciones Agropecuarias, Departamento Nacional de Recursos Fitogeneticos Y Biotecnolog, Estacion Experimental Sta. Catalina, Santa Catalina, Pichincha, Ecuador. Received 10/07/1996.

PI 653837. *Arachis hypogaea* subsp. *fastigiata* Waldron

Landrace. WTS-58; mani; Grif 13839. Collected 08/29/1996 in Manabi, Ecuador. Latitude 0° 50' 51" S. Longitude 80° 9' 54" W. Elevation 180 m. Canton Bolivar, Parroquia Calceta, Localidad Calceta. Store. Seeds tan with purple flecks, size medium.

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 Recursos Fitogeneticos Y Biotecnolog, Estacion Experimental Sta. Catalina, Santa Catalina, Pichincha, Ecuador. Received 10/07/1996.

PI 653838. *Arachis hypogaea* var. *fastigiata* (Waldron) Krapov. & W. C. Greg.

Landrace. WTS-29; mani; Grif 13813. Collected 08/28/1996 in Pichincha, Ecuador. Latitude 0° 2' 29" S. Longitude 79° 29' 47" W. Elevation 330 m. Canton Santo Domingo de los Colorados, Localidad Recinto Monterrey. Store. Seeds red, size medium. Pods with minimal reticulation, 2-4 seeds per pod.

The following were donated by T.W. Whitaker, Imperial Valley Conservation Research, Center, USDA, SEA-AR, Brawley, California, United States. Received 12/05/1989.

PI 653839. *Cucurbita cordata* S. Watson

TWW 30; Grif 9445. Collected 09/30/1964 in Mexico. Received through Bahia de Los Angeles, Baja California Norte.

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 02/01/1993.

PI 653840. *Cucurbita moschata* Duchesne

Ex. No. 23; Grif 1589; YUAN ZHU XING NAN GUA.

The following were developed by Kimberlee Kidwell, Washington State University, Dept. of Crop & Soil Sciences, Pullman, Washington 99164-6420, United States. Received 05/21/2008.

PI 653841. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "WHIT"; WA008008; S0300100U; NSGC 18948. Pedigree - Challis/5/El Gaucho/Sonora 64//Spr Luke Mutant/3/Centennial/4/Alpowa. Soft white spring wheat. Awne, semi-dwarf, early to mid-season maturity, white straw, and white glumes. Targeted to the intermediate to high rainfall (>400mm average annual precipitation) production regions of Washington State, as a replacement Alpowa and Nick and a complement to Louise due to its high grain yield potential, high-temperature adult-plant resistance to stripe rust, and resistance to local biotypes of the Hessian fly. Milling and baking qualities are equivalent or superior to Alturas, which is also a partial waxy wheat, and a dramatic improvement over Alpowa.

PI 653842. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "KELSE"; WA007954; H0100092; NSGC 18949. Pedigree - Westbred 906R/PI520542//Scholar. Hard red spring wheat. Awne, semi-dwarf, mid-season maturity, white straw, and tan glumes. Targeted to the intermediate to high rainfall (>400mm average annual precipitation) production regions of Washington State, as a replacement for WestBred6, Tara 2002, and Scarlet due to its high grain yield potential, high-temperature, adult-plant resistance to stripe rust, and resistance to local biotypes of the Hessian fly. Outstanding baking quality compared to other hard red spring wheat varieties in commercial production in the Pacific Northwest. Test weight and grain protein content are typically higher than WestBred 926.

The following were developed by Janice Bohac, USDA, ARS, U.S. Vegetable Laboratory, 2700 Savannah Highway, Charleston, South Carolina 29414, United States; D. Michael Jackson, USDA, ARS, U.S. Vegetable Laboratory, 2700 Savannah Highway, Charleston, South Carolina 29414, United States. Received 09/26/2007.

PI 653843. *Ipomoea batatas* (L.) Lam. var. *batatas*

Cultivar. "Charleston Scarlet"; W-375. Pedigree - Charleston Scarlet originated in 1996 as a seedling from an open-pollinated polycross consisting of a total of 27 parental clones.

PI 653844. *Ipomoea batatas* (L.) Lam. var. *batatas*

Cultivar. "LIBERTY"; W-341. Pedigree - Liberty originated in 1993 as a seedling of maternal parent 'White Regal' from an open-pollinated polycross consisting of a total of 32 parental clones.

PI 653845. *Ipomoea batatas* (L.) Lam. var. *batatas*

Cultivar. W-392. Pedigree - W-392 originated in 1997 as a seedling from an open-pollinated polycross consisting of a total of 23 parental clones.

The following were donated by Tran Thanh Binh, Center Research Legume and Development, Thanh Tri, Hanoi, Vietnam. Received 05/19/2008.

PI 653846. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806001.

PI 653847. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806002.

PI 653848. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806003.

PI 653849. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806004.

PI 653850. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806005.

PI 653851. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806006.

PI 653852. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806007.

PI 653853. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806008.

PI 653854. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806009.

PI 653855. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806010.

PI 653856. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806011.

PI 653857. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806012.

PI 653858. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806013.

PI 653859. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806014.

PI 653860. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806015.

PI 653861. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806016.

PI 653862. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806017.

PI 653863. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806018.

PI 653864. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806019.

PI 653865. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806020.

PI 653866. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806021.

PI 653867. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806022.

PI 653868. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806023.

PI 653869. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806024.

PI 653870. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806025.

PI 653871. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806026.

PI 653872. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806027.

PI 653873. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806028.

PI 653874. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806029.

PI 653875. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806030.

PI 653876. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806031.

PI 653877. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806032.

PI 653878. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806033.

PI 653879. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806034.

PI 653880. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806035.

PI 653881. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806036.

PI 653882. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806037.

PI 653883. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806038.

PI 653884. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806039.

PI 653885. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806040.

PI 653886. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806041.

PI 653887. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806042.

PI 653888. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806043.

PI 653889. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806044.

PI 653890. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806045.

PI 653891. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806046.

PI 653892. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806047.

PI 653893. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806048.

PI 653894. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806049.

PI 653895. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806050.

PI 653896. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806051.

PI 653897. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806052.

PI 653898. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806053.

PI 653899. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806054.

PI 653900. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806055.

PI 653901. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806056.

PI 653902. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806057.

PI 653903. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806058.

PI 653904. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806059.

PI 653905. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806060.

PI 653906. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806061.

PI 653907. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806062.

PI 653908. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806063.

PI 653909. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806064.

PI 653910. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806065.

PI 653911. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806066.

PI 653912. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806067.

PI 653913. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806068.

PI 653914. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806069.

PI 653915. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806070.

PI 653916. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806071.

PI 653917. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806072.

PI 653918. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806073.

PI 653919. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806074.

PI 653920. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806075.

PI 653921. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806076.

PI 653922. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806077.

PI 653923. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806078.

PI 653924. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806079.

PI 653925. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806080.

PI 653926. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806081.

PI 653927. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806082.

PI 653928. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806083.

PI 653929. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806084.

PI 653930. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806085.

PI 653931. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806086.

PI 653932. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806087.

PI 653933. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806088.

PI 653934. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806089.

PI 653935. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806090.

PI 653936. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806091.

PI 653937. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806092.

PI 653938. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806093.

PI 653939. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806094.

PI 653940. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806095.

PI 653941. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806096.

PI 653942. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806097.

PI 653943. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806098.

PI 653944. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806099.

PI 653945. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806100.

PI 653946. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806101.

PI 653947. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806102.

PI 653948. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806103.

PI 653949. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806104.

PI 653950. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806105.

PI 653951. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806106.

PI 653952. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806107.

PI 653953. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806108.

PI 653954. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806109.

PI 653955. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806110.

PI 653956. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806111.

PI 653957. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806112.

PI 653958. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806113.

PI 653959. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806114.

PI 653960. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806115.

PI 653961. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806116.

PI 653962. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806117.

PI 653963. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806118.

PI 653964. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806119.

PI 653965. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806120.

PI 653966. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806121.

PI 653967. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806122.

PI 653968. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806123.

PI 653969. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806124.

PI 653970. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806125.

PI 653971. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806126.

PI 653972. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806127.

PI 653973. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806128.

PI 653974. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806129.

PI 653975. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806130.

PI 653976. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806131.

PI 653977. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806132.

PI 653978. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806133.

PI 653979. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806134.

PI 653980. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806135.

PI 653981. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806136.

PI 653982. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806137.

PI 653983. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806138.

PI 653984. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806139.

PI 653985. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806140.

PI 653986. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806141.

PI 653987. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806142.

PI 653988. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806143.

PI 653989. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806144.

PI 653990. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806145.

PI 653991. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806146.

PI 653992. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806147.

PI 653993. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806148.

PI 653994. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806149.

PI 653995. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806150.

PI 653996. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806151.

PI 653997. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806152.

PI 653998. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806153.

PI 653999. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806154.

PI 654000. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806155.

PI 654001. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806156.

PI 654002. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806157.

PI 654003. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806158.

PI 654004. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806159.

PI 654005. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806160.

PI 654006. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806161.

PI 654007. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806162.

PI 654008. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806163.

PI 654009. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806164.

PI 654010. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806165.

PI 654011. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806166.

PI 654012. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806167.

PI 654013. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806168.

PI 654014. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806169.

PI 654015. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806170.

PI 654016. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806171.

PI 654017. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806172.

PI 654018. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806173.

PI 654019. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806174.

PI 654020. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806175.

PI 654021. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806176.

PI 654022. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806177.

PI 654023. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806178.

PI 654024. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806179.

PI 654025. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806180.

PI 654026. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806181.

PI 654027. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806182.

PI 654028. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806183.

PI 654029. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806184.

PI 654030. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806185.

PI 654031. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806186.

PI 654032. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806187.

PI 654033. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806188.

PI 654034. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806189.

PI 654035. **Glycine max** (L.) Merr.
Uncertain. Pureline. SY 806190.

- PI 654036. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806191.
- PI 654037. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806192.
- PI 654038. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806193.
- PI 654039. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806194.
- PI 654040. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806195.
- PI 654041. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806196.
- PI 654042. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806197.
- PI 654043. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806198.
- PI 654044. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806199.
- PI 654045. *Glycine max* (L.) Merr.
Uncertain. Pureline. SY 806200.

The following were developed by J. G. McLeod, Agriculture Canada, Swift Current Research Station, P. O. Box 1030, Swift Current, Saskatchewan S9H 3X2, Canada. Received 05/13/2008.

- PI 654046. *Medicago sativa* subsp. *falcata* (L.) Arcang.
Cultivar. Population. "YELLOWHEAD"; AC YELLOWHEAD; ScMf 3713. Pedigree - Selected from a collection made from a wild population of *falcata* type alfalfa growing near Swift Current Saskatchewan. A *falcata* type alfalfa with a high level of fall dormancy, rated at a 1 level. Very persistent when grown in mixed swards because it is competitive and has good winter survival ability. Long term experiments (more than 3 years) have shown that AC Yellowhead is a high yielding cultivar and is recommended to be included in pasture and hay mixes intended for long term productivity, particularly if a single cut hay crop is intended. Has moderate resistance to bacterial wilt caused by *Clavibacter michiganensis* subsp. *insidiosus* and appears to have a form of field resistance to verticillium wilt caused by *Clavibacter michiganensis* subsp. *insidiosus* and appears to have a form of field resistance to verticillium wilt caused by *Verticillium albo-atrum*.

The following were developed by Thomas E. Devine, USDA, ARS, Sustainable Agricultural Systems Laboratory, Building 001, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 05/14/2008.

PI 654047. *Vicia villosa* Roth

Cultivar. Population. "PURPLE PROSPERITY". PVP 200800302. Pedigree - Derived from hybridization by bumble bees of the hairy vetch populations PI 561947 and cultivar Auburn Early Cover. In subsequent recurrent selection during development of Purple Prosperity, the population was subject to open pollination in nursery's containing diverse population of hairy vetch. Bred by selection for winter hardiness and vigorous growth.

The following were developed by Robert Brown, USDA-ARS-SRRC, 1100 Robert E. Lee Blvd., New Orleans, Louisiana 70124, United States; Ranajit Bandyopadhyay, International Institute of Tropical Agriculture, Oyo Road, PMB 5320, Ibadan, Oyo, Nigeria; A. Menkir, International Institute of Tropical Agriculture, Oyo Road, PMB 5320, Ibadan, Oyo, Nigeria; Thomas E. Cleveland, USDA-ARS, Southern Regional Research Center, New Orleans, Louisiana 70179, United States. Received 05/09/2008.

PI 654048 QUAR. *Zea mays* L. subsp. *mays*

Breeding. Inbred. TZAR101. GP-568. Pedigree - TZAR101 was derived from a cross of involving a tropical inbred line with low aflatoxin production (1368) to a temperate aflatoxin resistant genotypes (GT-MAS:gk). TZAR101 is an inbred line at the S9 stage of inbreeding and was selected for resistance to aflatoxin contamination. This line also has good levels of resistance to southern corn leaf blight (*Bipolaris maydis* (Nisikado & Miyake) Shoemaker) and southern corn rust (*Puccinia polysora* Underw). This line has a yellow endosperm color with flint grain texture. This line tassels in 61 days, silks in 62 days and has plant height of 147 cm and ear height of 59 cm.

PI 654049 QUAR. *Zea mays* L. subsp. *mays*

Breeding. Inbred. TZAR102. GP-569. Pedigree - TZAR102 was derived from a cross of involving a tropical maize inbred line with low aflatoxin production (1368) to an aflatoxin resistant temperate inbred line (MI82). TZAR102 is an inbred line at the S9 stage of inbreeding and was selected for resistance to aflatoxin contamination. This line also has good levels of resistance to southern corn leaf blight (*Bipolaris maydis* (Nisikado & Miyake) Shoemaker) and southern corn rust (*Puccinia polysora* Underw). This line has a white endosperm color with flint grain texture. This line tassels in 65 days, silks in 66 days and has plant height of 142 cm and ear height of 54 cm.

PI 654050 QUAR. *Zea mays* L. subsp. *mays*

Breeding. Inbred. TZAR103. GP-570. Pedigree - TZAR103 was derived from a cross of involving a tropical maize inbred line with low aflatoxin production (1368) to an aflatoxin resistant temperate inbred line (MI82). TZAR103 is an inbred line at the S9 stage of inbreeding and was selected for resistance to aflatoxin contamination. This line also has good levels of resistance to southern corn leaf blight (*Bipolaris maydis* (Nisikado & Miyake) Shoemaker) and southern corn rust (*Puccinia polysora* Underw). This line has a white endosperm color with flint grain texture. This line tassels in 64 days, silks in 66 days and has plant height of 129 cm and ear height of 53 cm.

PI 654051 QUAR. *Zea mays* L. subsp. *mays*

Breeding. Inbred. TZAR104. GP-571. Pedigree - TZAR104 was extracted from a backcross involving aflatoxin resistant temperate genotype (GT-MAS:gk)

as a recurrent parent and a tropical inbred line (KU1414-SR) as a non-recurrent parent. TZAR104 is an inbred line at the S8 stage of inbreeding and was selected for resistance to aflatoxin contamination. This line also has good levels of resistance to southern corn leaf blight (*Bipolaris maydis* (Nisikado & Miyake) Shoemaker) and southern corn rust (*Puccinia polysora* Underw). This line has a yellow endosperm color with flint grain texture. This line tassels in 63 days, silks in 65 days and has plant height of 160 cm and ear height of 75 cm.

PI 654052 QUAR. *Zea mays* L. subsp. *mays*

Breeding. Inbred. TZAR105. GP-572. Pedigree - TZAR105 was developed from a backcross involving aflatoxin resistant temperate maize inbred line (MP420) as a recurrent parent and a tropical inbred line (4001) as a non-recurrent parent. TZAR105 is an inbred line at the S8 stage of inbreeding and was selected for resistance to aflatoxin contamination. This line also has good levels of resistance to southern corn leaf blight (*Bipolaris maydis* (Nisikado & Miyake) Shoemaker) and southern corn rust (*Puccinia polysora* Underw). This line has a yellow endosperm color with flint grain texture. This line tassels in 61 days, silks in 63 days and has plant height of 155 cm and ear height of 68 cm.

PI 654053 QUAR. *Zea mays* L. subsp. *mays*

Breeding. TZAR106. GP-573. Pedigree - TZAR106 was developed from a backcross involving aflatoxin resistant temperate maize inbred line (MP420) as a recurrent parent and a tropical inbred line (4001) as a non-recurrent parent. TZAR106 is an inbred line at the S10 stage of inbreeding and was selected for resistance to aflatoxin contamination. This line also has good levels of resistance to southern corn leaf blight (*Bipolaris maydis* (Nisikado & Miyake) Shoemaker) and southern corn rust (*Puccinia polysora* Underw). This line has a yellow endosperm color with flint grain texture. This line tassels in 62 days, silks in 64 days and has plant height of 127 cm and ear height of 63 cm.

The following were developed by Monsanto Technology LLC, United States.
Received 05/15/2008.

PI 654054 PVPO. *Gossypium hirsutum* L.

Cultivar. "779020G". PVP 200800271.

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 654055. *Arachis hypogaea* L.

"PERZUNAN"; II-1-363; Grif 12344. Collected in Hungary.

The following were collected by Cesar Tapia, Instituto Nacional Autonomo de Investigaciones Agropecuarias, Departamento Nacional de Recursos Fitogeneticos Y Biotecnolog, Estacion Experimental Sta. Catalina, Santa Catalina, Pichincha, Ecuador; Alvaro Monteros, Instituto Nacional Autonomo de Investigaciones Agropecuarias, Departamento Nacional de Recursos Fitogeneticos y Biotecnolog, Estacion Experimental Sta. Catalina, Santa Catalina, Pichincha, Ecuador. Received 11/23/1999.

PI 654056. *Arachis hypogaea* L.

Landrace. TM-012; mani; NGRL 289; Grif 14305. Collected 09/19/1999 in Napo, Ecuador. Latitude 1° 11' 16" S. Longitude 77° 52' 6" W. Elevation 650 m. Canton Arosemena Tola; Localidad El Capricho. Seeds purple; 3 seeds per pod.

PI 654057. *Arachis hypogaea* L.

Landrace. TM-013; mani; NGRL 290; Grif 14306. Collected 09/19/1999 in Morona-Santiago, Ecuador. Latitude 2° 18' 39" S. Longitude 78° 7' 13" W. Elevation 330 m. Canton Morona; Parroquia Macas; Localidad Macas. Seeds red.

PI 654058. *Arachis hypogaea* L.

Landrace. TM-015; nuse; NGRL 292; Grif 14308. Collected 09/20/1999 in Morona-Santiago, Ecuador. Latitude 2° 44' 26" S. Longitude 78° 15' 11" W. Elevation 500 m. Canton Mendez; Parroquia Patuca; Localidad Nunkande. Seeds cream-colored; 3 to 4 seed per pod.

PI 654059. *Arachis hypogaea* L.

Landrace. TM-016; mani; NGRL 293; Grif 14309. Collected 09/20/1999 in Morona-Santiago, Ecuador. Latitude 2° 50' 7" S. Longitude 78° 21' 31" W. Elevation 700 m. Canton Indanza; Parroquia Yunganza; Localidad Yunganza. Seeds white; 3 to 4 seed per pod.

PI 654060. *Arachis hypogaea* L.

Landrace. TM-031; mani criollo; NGRL 306; Grif 14322. Collected 09/23/1999 in Loja, Ecuador. Latitude 4° 7' 16" S. Longitude 80° 6' 29" W. Elevation 800 m. Canton Celica; Parroquia Pindal; Localidad Pindal; 9.4 km from Celica towards Zapotillo. Seeds mottled with purple and cream.

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 11/23/1999.

PI 654061. *Arachis hypogaea* L.

Landrace. TE-006; corriente; NGRL 312; Grif 14328. Collected 09/25/1999 in El Oro, Ecuador. Latitude 3° 45' 38" S. Longitude 79° 49' 5" W. Elevation 750 m. Canton Balsas; Parroquia Bella Maria; Localidad Balsas. Seeds purple with darker purple stripes; 3 to 4 seeds per pod.

PI 654062. *Arachis hypogaea* L.

Landrace. TE-008; mani; NGRL 314; Grif 14330. Collected 09/25/1999 in El Oro, Ecuador. Latitude 3° 35' 51" S. Longitude 80° 11' 29" W. Elevation 160 m. Canton Arenillas; Parroquia Chacras; Localidad Guabillo. Seeds purple; 2 to 3 seeds per pod.

The following were collected by Roy N. Pittman, USDA, ARS, Plant Genetic Resources Conservation Unit, 1109 Experiment Street, Griffin, Georgia 30223-1797, United States; Pedro Juan Caballero, Ministry of Agriculture and Livestock, Instituto Agronomico Nacional, Caacupe, Paraguay; Mary J. (Mimi) Williams, USDA, ARS, Beef Cattle Research, 22271 Chiusegut Hill Road,

Brooksville, Florida 34601, United States; Esteban Pizarro, Universidad de Republica, School of Agricultural Science, Forage Conservation and Utilization, Montevideo, Uruguay; L.E. Robledo, Direccion de Investigacion Agricola, Ministerio de Agricultura y Ganaderia, Asuncion, Paraguay. Received 06/17/2003.

PI 654063. *Arachis hypogaea* L.

Cultivated. CbRbWiPmPz 982; Grif 15213. Collected 05/30/2003 in Paraguay. Latitude 23° 5' 57" S. Longitude 57° 23' 14" W. Elevation 110 m. S Paso Hortequa. Garden. Tan or white seeded Valencia type. Effective population size - > 100 plants.

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; Luis Manuel Arias-Reyes, CINVESTAV - Unidad Merida, Seccion de Ecologia Humana, A.P. 73, CORDEMEX, Merida, Yucatan, Mexico. Received 11/16/1993.

PI 654064. *Arachis hypogaea* var. *fastigiata* (Waldron) Krapov. & W. C. Greg.

Landrace. DEW 1261; cacahuete; Grif 14444. Collected 10/17/1993 in Mexico. Latitude 20° 24' N. Longitude 89° 32' W. Elevation 35 m. Ticul, Mpio. Ticul, Edo. Yucatan. Purchased from peanut buyer in town market. Fruits 3.5-5 cm long, 1.5 cm diam., straight, little or no constriction, slight humps and beak, subdued reticulation, containing 3-4 reddish brown seeds. Said to be the only variety grown locally.

The following were developed by Mauricio Ulloa, USDA, ARS, W.I.C.S. Research Unit, 17053 N. Shafter Ave., Shafter, California 93263, United States. Received 05/30/2008.

PI 654065. *Gossypium barbadense* L.

Breeding. Population. SJ-07P-FR01. Pedigree - Originated from a cross of germplasm lines 8810 and NMSI 1601. Line 8810 possesses superior fiber strength and high yield potential when grown in the high temperatures of the far west. Line 8810 was developed from a cross between P 73 x P 72. The P 73 parent of 8810 was developed from the cross P 53 X PS 6. NMSI 1601 was developed by New Mexico State University Agricultural Experiment Station from a selection originating from Monseratt Sea Island line and possesses excellent fiber length and fineness. SJ-07P-FR01, SJ-07P-FR02, SJ-07P-FR03 and SJ-07P-FR04 were developed and released to provide germplasm with good levels of resistance to Fusarium wilt [*Fusarium oxysporum* f. sp. *vasinfectum*] race 4 to cotton breeders in California. These lines provide needed alternative sources of FOV resistance and broaden the genetic base of resistant germplasm critical to maintaining a healthy Pima cotton industry in the San Joaquin Valley of California. Lines SJ-07P-FR01-FR03 were developed from a single F2 plant and advanced from F2 to F3 by single plant selection. Following generations were advanced as individual families or populations. SJ-07P-FR04 is a population originating from re-selection within P 73. The lines were evaluated for resistance to race 4 in two field trials conducted in 2003 and 2004 and in three greenhouse trials conducted in 2004 and 2005. Five replicated field evaluations for yield potential, fiber characteristics, and other agronomic traits were conducted at Westside, CA, Shafter, CA and Maricopa, AZ in 2005 and 2006. The SJ-07P-FR series possesses moderate lint yield potential, and good to

superior fiber length and strength. Caution should be applied when utilizing these lines and it should not be assumed that the lines provide complete resistance against FOV race 4.

PI 654066. *Gossypium barbadense* L.

Breeding. Population. SJ-07P-FR02. Pedigree - Originated from a cross of germplasm lines 8810 and NMSI 1601. Line 8810 possesses superior fiber strength and high yield potential when grown in the high temperatures of the far west. Line 8810 was developed from a cross between P 73 x P 72. The P 73 parent of 8810 was developed from the cross P 53 X PS 6. NMSI 1601 was developed by New Mexico State University Agricultural Experiment Station from a selection originating from Monseratt Sea Island line and possesses excellent fiber length and fineness.

SJ-07P-FR01, SJ-07P-FR02, SJ-07P-FR03 and SJ-07P-FR04 were developed and released to provide germplasm with good levels of resistance to Fusarium wilt [*Fusarium oxysporum* f. sp. *vasinfectum*] race 4 to cotton breeders in California. These lines provide needed alternative sources of FOV resistance and broaden the genetic base of resistant germplasm critical to maintaining a healthy Pima cotton industry in the San Joaquin Valley of California. Lines SJ-07P-FR01-FR03 were developed from a single F2 plant and advanced from F2 to F3 by single plant selection. Following generations were advanced as individual families or populations.

SJ-07P-FR04 is a population originating from re-selection within P 73. The lines were evaluated for resistance to race 4 in two field trials conducted in 2003 and 2004 and in three greenhouse trials conducted in 2004 and 2005. Five replicated field evaluations for yield potential, fiber characteristics, and other agronomic traits were conducted at Westside, CA, Shafter, CA and Maricopa, AZ in 2005 and 2006. The SJ-07P-FR series possesses moderate lint yield potential, and good to superior fiber length and strength. Caution should be applied when utilizing these lines and it should not be assumed that the lines provide complete resistance against FOV race 4.

PI 654067. *Gossypium barbadense* L.

Breeding. Population. SJ-07P-FR03. Pedigree - Originated from a cross of germplasm lines 8810 and NMSI 1601. Line 8810 possesses superior fiber strength and high yield potential when grown in the high temperatures of the far west. Line 8810 was developed from a cross between P 73 x P 72. The P 73 parent of 8810 was developed from the cross P 53 X PS 6. NMSI 1601 was developed by New Mexico State University Agricultural Experiment Station from a selection originating from Monseratt Sea Island line and possesses excellent fiber length and fineness.

SJ-07P-FR01, SJ-07P-FR02, SJ-07P-FR03 and SJ-07P-FR04 were developed and released to provide germplasm with good levels of resistance to Fusarium wilt [*Fusarium oxysporum* f. sp. *vasinfectum*] race 4 to cotton breeders in California. These lines provide needed alternative sources of FOV resistance and broaden the genetic base of resistant germplasm critical to maintaining a healthy Pima cotton industry in the San Joaquin Valley of California. Lines SJ-07P-FR01-FR03 were developed from a single F2 plant and advanced from F2 to F3 by single plant selection. Following generations were advanced as individual families or populations.

SJ-07P-FR04 is a population originating from re-selection within P 73. The lines were evaluated for resistance to race 4 in two field trials conducted in 2003 and 2004 and in three greenhouse trials conducted in 2004 and 2005. Five replicated field evaluations for yield potential, fiber characteristics, and other agronomic traits were conducted at Westside, CA, Shafter, CA and Maricopa, AZ in 2005 and 2006. The

SJ-07P-FR series possesses moderate lint yield potential, and good to superior fiber length and strength. Caution should be applied when utilizing these lines and it should not be assumed that the lines provide complete resistance against FOV race 4.

PI 654068. *Gossypium barbadense* L.

Breeding. Population. SJ-07P-FR04. Pedigree - Originated from a cross of germplasm lines 8810 and NMSI 1601. Line 8810 possesses superior fiber strength and high yield potential when grown in the high temperatures of the far west. Line 8810 was developed from a cross between P 73 x P 72. The P 73 parent of 8810 was developed from the cross P 53 X PS 6. NMSI 1601 was developed by New Mexico State University Agricultural Experiment Station from a selection originating from Monseratt Sea Island line and possesses excellent fiber length and fineness.

SJ-07P-FR01, SJ-07P-FR02, SJ-07P-FR03 and SJ-07P-FR04 were developed and released to provide germplasm with good levels of resistance to Fusarium wilt [*Fusarium oxysporum* f. sp. *vasinfectum*] race 4 to cotton breeders in California. These lines provide needed alternative sources of FOV resistance and broaden the genetic base of resistant germplasm critical to maintaining a healthy Pima cotton industry in the San Joaquin Valley of California. Lines SJ-07P-FR01-FR03 were developed from a single F2 plant and advanced from F2 to F3 by single plant selection. Following generations were advanced as individual families or populations.

SJ-07P-FR04 is a population originating from re-selection within P 73. The lines were evaluated for resistance to race 4 in two field trials conducted in 2003 and 2004 and in three greenhouse trials conducted in 2004 and 2005. Five replicated field evaluations for yield potential, fiber characteristics, and other agronomic traits were conducted at Westside, CA, Shafter, CA and Maricopa, AZ in 2005 and 2006. The SJ-07P-FR series possesses moderate lint yield potential, and good to superior fiber length and strength. Caution should be applied when utilizing these lines and it should not be assumed that the lines provide complete resistance against FOV race 4.

The following were developed by Mario C. Therrien, Agriculture and Agri-Food Canada, Brandon Research Centre, Box 1000A, Brandon, Manitoba R7A 5Z7, Canada. Received 05/29/2008.

PI 654069. *Hordeum vulgare* L. subsp. *vulgare*

Cultivar. Pureline. "DESPERADO"; FB012; EX695-6-12. REST 654069; CV-340. Pedigree - Brandon CC 053/B1602/Br. 806F6/Argyle/AC Lacombe/Minn. M82/AC Rosser/Chapais/BT375. A six-row spring barley well-adapted to the Northern Great Plains region of North America. Relatively tall (94.2 cm), erect growth habit, mid-maturity cultivar with average lodging characteristics. Growth habit tends to be dense and leafy, classifying it as a forage type. Has semi-erect, medium spikes with semi-smooth awns that have red tips. Kernels are of medium length and narrow width and a relatively high test weight, averaging 66.7 kg hl⁻¹. Moderately resistant to common root rot, incited by *Cochliobolus sativus*, resistant to most races of stem rust, incited by *Puccinia graminis* sp. f. *triticii*), but susceptible to race QCCJ. Moderately susceptible to Fusarium Head Blight incited by *Fusarium graminearum*, and is intermediate in reaction to net blotch, incited by *Pyrenophora teres* and spot blotch, incited by *Cochliobolus sativus*. Resistant to the surface-borne smuts, incited by *Ustilago nigra* and *Ustilago hordeii* but is susceptible to true loose smut, incited by *Ustilago nuda*. There is a

susceptible reaction to both scald (*Rhynchosporium secalis*) and septioria (*Septoria passerinii*).

The following were developed by Florida Agricultural Experiment Station, Florida, United States. Received 05/27/2008.

PI 654070 PVPO. *Arachis hypogaea* L.
Cultivar. "AP-4". PVP 200800158.

The following were developed by Rutgers, The State University of New Jersey, New Jersey, United States. Received 06/06/2008.

PI 654071 PVPO. *Poa pratensis* L.
Cultivar. "BLACKBERRY"; A99-3108. PVP 200800178.

PI 654072 PVPO. *Poa pratensis* L.
Cultivar. "A98-948". PVP 200800179.

PI 654073 PVPO. *Poa pratensis* L.
Cultivar. "CONCERTO". PVP 200800180.

PI 654074 PVPO. *Poa pratensis* L.
Cultivar. "A99-269". PVP 200800181.

The following were developed by DLF International Seeds, Inc., United States. Received 06/06/2008.

PI 654075 PVPO. *Festuca arundinacea* Schreb.
Cultivar. "VIRTUOSO". PVP 200800182.

The following were developed by 3 Star Lettuce, LLC, United States. Received 06/06/2008.

PI 654076 PVPO. *Lactuca sativa* L.
Cultivar. "PLATINUM". PVP 200800222.

The following were developed by GeneFresh, Inc., Salinas, California, United States. Received 06/06/2008.

PI 654077 PVPO. *Lactuca sativa* L.
Cultivar. "CONTENDER". PVP 200800223.

The following were developed by Yulex Corporation, United States. Received 06/06/2008.

PI 654078 PVPO. *Parthenium argentatum* A. Gray
Cultivar. "YX-5-03-blr-02". PVP 200800224.

PI 654079 PVPO. *Parthenium argentatum* A. Gray
Cultivar. "YX-5-03-BLR-01". PVP 200800225.

The following were developed by Bayer CropScience, United States. Received 06/06/2008.

PI 654080 PVPO. *Gossypium hirsutum* L.
Cultivar. "ST 5458B2RF". PVP 200800229.

PI 654081 PVPO. *Gossypium hirsutum* L.
Cultivar. "ST 4498B2RF". PVP 200800230.

The following were developed by Monsanto Technology LLC, United States. Received 06/06/2008.

PI 654082 PVPO. *Gossypium hirsutum* L.
Cultivar. "DP 104 B2RF". PVP 200800272.

The following were developed by Seminis Vegetable Seeds, Inc., Woodland, California, United States. Received 06/06/2008.

PI 654083 PVPO. *Capsicum annuum* L.
Cultivar. "SBR991260". PVP 200800275.

The following were developed by Enza Zaden Beheer B.V., Netherlands. Received 06/06/2008.

PI 654084 PVPO. *Lactuca sativa* L.
Cultivar. "TRUCKEE". PVP 200800276.

The following were developed by Seminis Vegetable Seeds, Inc., Woodland, California, United States. Received 06/06/2008.

PI 654085 PVPO. *Capsicum annuum* L.
Cultivar. "SBR991295". PVP 200800277.

PI 654086 PVPO. *Capsicum annuum* L.
Cultivar. "SBY991296". PVP 200800278.

The following were developed by Linghe Zeng, USDA-ARS, Mid-South Area, Crop Genetics and Production Unit, Stoneville, Mississippi 38776, United States. Received 06/17/2008.

PI 654087. *Gossypium hirsutum* L.
Breeding. Pureline. SP156. GP-903. Pedigree - SP156, SP177, SP179, SP205 and SP225 were developed by crossing 12 cultivars and strains of *G. hirsutum* with *G. barbadense*, *G. tomentosum*, *G. mustelinum*, and *G. darwinii*. The entries in *G. hirsutum* include Auburn M., Carolina Queen, ST213, DPSM, Coker 413, DP523, ST508-9117, TH149-20, PD2165, Ga.H.T., Atlas(AxC)-261, and Mo.61-470. Crosses were made at Raleigh, NC. The population of hybrid progenies underwent 11 generations of random mating. The population was advanced at Stoneville, MS. Progeny evaluation and selection was conducted at two locations with two replicates each at Stoneville, MS in 2005. Selected progeny lines were

further tested in replicated trials at Stoneville, MS in 2006 and 2007. Averaged over locations and years, lint yields of SP179 and SP225 were 1221 and 1348 kg ha⁻¹, respectively, similar or equivalent to high yielding check cultivar DP555BR (1359 kg ha⁻¹). Lint percent of SP225 was 39.5%. Bundle strength of SP179 and SP225 was 233 kNmkg⁻¹ and 228 kNmkg⁻¹, respectively, superior or equivalent to that of high fiber quality check FM960B2R (227 kNmkg⁻¹). Elongation of SP179 and SP225 was 6.6% and 6.5%, respectively, superior to that of FM960B2R (5.2%). Short fiber content of these two lines (5.0%) was also superior to FM960B2R (5.4%). Fineness of SP179 was 170 mtex, similar to FM960B2R (168 mtex). However, maturity ratio of SP179 was 0.95 comparing to 0.91 for FM960B2R. Average yield of SP156, SP177, and SP205 was 1080 kg ha⁻¹, higher than the average of the check cultivars FM960B2R and PHY72 (965 kg ha⁻¹). Fiber properties of these lines were similar to the averages of FM960B2R and PHY72, 6.3% of elongation, 241 kNmkg⁻¹ of bundle strength, 14.4 mm of 50% span length, 29.9 mm 2.5% span length, and 4.9% of short fiber content. Plant height of these five SP lines ranged from 145 to 153 cm at maturity. Leaf area of the 4th fully extended leaf from top of plant ranged from 125 to 148 cm². Leaf length ranged from 12.0 to 13.8 cm. Nodes of the first fruiting branch ranged from 6.5 to 8.3. Days from planting to the first boll of the five SP lines averaged 126. Pair-wise genetic distances were estimated using molecular markers (SSR) between the five SP lines and five check cultivars, DP555BR, FM960B2R, PHY72, PM2167R, and ST4892BR. All SP lines except SP225 had less than 0.52 similarity coefficient with the check cultivars. SP225 had 0.70 similarity with DP555BR.

PI 654088. *Gossypium hirsutum* L.

Breeding. Pureline. SP177. GP-904. Pedigree - SP156, SP177, SP179, SP205 and SP225 were developed by crossing 12 cultivars and strains of *G. hirsutum* with *G. barbadense*, *G. tomentosum*, *G. mustelinum*, and *G. darwinii*. The entries in *G. hirsutum* include Auburn M., Carolina Queen, ST213, DPSM, Coker 413, DP523, ST508-9117, TH149-20, PD2165, Ga.H.T., Atlas(AxC)-261, and Mo.61-470. Crosses were made at Raleigh, NC. The population of hybrid progenies underwent 11 generations of random mating. The population was advanced at Stoneville, MS. Progeny evaluation and selection was conducted at two locations with two replicates each at Stoneville, MS in 2005. Selected progeny lines were further tested in replicated trials at Stoneville, MS in 2006 and 2007. Averaged over locations and years, lint yields of SP179 and SP225 were 1221 and 1348 kg ha⁻¹, respectively, similar or equivalent to high yielding check cultivar DP555BR (1359 kg ha⁻¹). Lint percent of SP225 was 39.5%. Bundle strength of SP179 and SP225 was 233 kNmkg⁻¹ and 228 kNmkg⁻¹, respectively, superior or equivalent to that of high fiber quality check FM960B2R (227 kNmkg⁻¹). Elongation of SP179 and SP225 was 6.6% and 6.5%, respectively, superior to that of FM960B2R (5.2%). Short fiber content of these two lines (5.0%) was also superior to FM960B2R (5.4%). Fineness of SP179 was 170 mtex, similar to FM960B2R (168 mtex). However, maturity ratio of SP179 was 0.95 comparing to 0.91 for FM960B2R. Average yield of SP156, SP177, and SP205 was 1080 kg ha⁻¹, higher than the average of the check cultivars FM960B2R and PHY72 (965 kg ha⁻¹). Fiber properties of these lines were similar to the averages of FM960B2R and PHY72, 6.3% of elongation, 241 kNmkg⁻¹ of bundle strength, 14.4 mm of 50% span length, 29.9 mm 2.5% span length, and 4.9% of short fiber content. Plant height of these five SP lines ranged from 145 to 153 cm at maturity. Leaf area of the 4th fully extended leaf from top of plant ranged from 125 to 148 cm². Leaf length ranged from 12.0 to

13.8 cm. Nodes of the first fruiting branch ranged from 6.5 to 8.3. Days from planting to the first boll of the five SP lines averaged 126. Pair-wise genetic distances were estimated using molecular markers (SSR) between the five SP lines and five check cultivars, DP555BR, FM960B2R, PHY72, PM2167R, and ST4892BR. All SP lines except SP225 had less than 0.52 similarity coefficient with the check cultivars. SP225 had 0.70 similarity with DP555BR.

PI 654089. *Gossypium hirsutum* L.

Breeding. Pureline. SP179. GP-905. Pedigree - SP156, SP177, SP179, SP205 and SP225 were developed by crossing 12 cultivars and strains of *G. hirsutum* with *G. barbadense*, *G. tomentosum*, *G. mustelinum*, and *G. darwinii*. The entries in *G. hirsutum* include Auburn M., Carolina Queen, ST213, DPSM, Coker 413, DP523, ST508-9117, TH149-20, PD2165, Ga.H.T., Atlas(AxC)-261, and Mo.61-470. Crosses were made at Raleigh, NC. The population of hybrid progenies underwent 11 generations of random mating. The population was advanced at Stoneville, MS. Progeny evaluation and selection was conducted at two locations with two replicates each at Stoneville, MS in 2005. Selected progeny lines were further tested in replicated trials at Stoneville, MS in 2006 and 2007. Averaged over locations and years, lint yields of SP179 and SP225 were 1221 and 1348 kg ha⁻¹, respectively, similar or equivalent to high yielding check cultivar DP555BR (1359 kg ha⁻¹). Lint percent of SP225 was 39.5%. Bundle strength of SP179 and SP225 was 233 kNmkg⁻¹ and 228 kNmkg⁻¹, respectively, superior or equivalent to that of high fiber quality check FM960B2R (227 kNmkg⁻¹). Elongation of SP179 and SP225 was 6.6% and 6.5%, respectively, superior to that of FM960B2R (5.2%). Short fiber content of these two lines (5.0%) was also superior to FM960B2R (5.4%). Fineness of SP179 was 170 mtex, similar to FM960B2R (168 mtex). However, maturity ratio of SP179 was 0.95 comparing to 0.91 for FM960B2R. Average yield of SP156, SP177, and SP205 was 1080 kg ha⁻¹, higher than the average of the check cultivars FM960B2R and PHY72 (965 kg ha⁻¹). Fiber properties of these lines were similar to the averages of FM960B2R and PHY72, 6.3% of elongation, 241 kNmkg⁻¹ of bundle strength, 14.4 mm of 50% span length, 29.9 mm 2.5% span length, and 4.9% of short fiber content. Plant height of these five SP lines ranged from 145 to 153 cm at maturity. Leaf area of the 4th fully extended leaf from top of plant ranged from 125 to 148 cm². Leaf length ranged from 12.0 to 13.8 cm. Nodes of the first fruiting branch ranged from 6.5 to 8.3. Days from planting to the first boll of the five SP lines averaged 126. Pair-wise genetic distances were estimated using molecular markers (SSR) between the five SP lines and five check cultivars, DP555BR, FM960B2R, PHY72, PM2167R, and ST4892BR. All SP lines except SP225 had less than 0.52 similarity coefficient with the check cultivars. SP225 had 0.70 similarity with DP555BR.

PI 654090. *Gossypium hirsutum* L.

Breeding. Pureline. SP205. GP-906. Pedigree - SP156, SP177, SP179, SP205 and SP225 were developed by crossing 12 cultivars and strains of *G. hirsutum* with *G. barbadense*, *G. tomentosum*, *G. mustelinum*, and *G. darwinii*. The entries in *G. hirsutum* include Auburn M., Carolina Queen, ST213, DPSM, Coker 413, DP523, ST508-9117, TH149-20, PD2165, Ga.H.T., Atlas(AxC)-261, and Mo.61-470. Crosses were made at Raleigh, NC. The population of hybrid progenies underwent 11 generations of random mating. The population was advanced at Stoneville, MS. Progeny evaluation and selection was conducted at two locations with two replicates each at Stoneville, MS in 2005. Selected progeny lines were

further tested in replicated trials at Stoneville, MS in 2006 and 2007. Averaged over locations and years, lint yields of SP179 and SP225 were 1221 and 1348 kg ha⁻¹, respectively, similar or equivalent to high yielding check cultivar DP555BR (1359 kg ha⁻¹). Lint percent of SP225 was 39.5%. Bundle strength of SP179 and SP225 was 233 kNmkg⁻¹ and 228 kNmkg⁻¹, respectively, superior or equivalent to that of high fiber quality check FM960B2R (227 kNmkg⁻¹). Elongation of SP179 and SP225 was 6.6% and 6.5%, respectively, superior to that of FM960B2R (5.2%). Short fiber content of these two lines (5.0%) was also superior to FM960B2R (5.4%). Fineness of SP179 was 170 mtex, similar to FM960B2R (168 mtex). However, maturity ratio of SP179 was 0.95 comparing to 0.91 for FM960B2R. Average yield of SP156, SP177, and SP205 was 1080 kg ha⁻¹, higher than the average of the check cultivars FM960B2R and PHY72 (965 kg ha⁻¹). Fiber properties of these lines were similar to the averages of FM960B2R and PHY72, 6.3% of elongation, 241 kNmkg⁻¹ of bundle strength, 14.4 mm of 50% span length, 29.9 mm 2.5% span length, and 4.9% of short fiber content. Plant height of these five SP lines ranged from 145 to 153 cm at maturity. Leaf area of the 4th fully extended leaf from top of plant ranged from 125 to 148 cm². Leaf length ranged from 12.0 to 13.8 cm. Nodes of the first fruiting branch ranged from 6.5 to 8.3. Days from planting to the first boll of the five SP lines averaged 126. Pair-wise genetic distances were estimated using molecular markers (SSR) between the five SP lines and five check cultivars, DP555BR, FM960B2R, PHY72, PM2167R, and ST4892BR. All SP lines except SP225 had less than 0.52 similarity coefficient with the check cultivars. SP225 had 0.70 similarity with DP555BR.

PI 654091. *Gossypium hirsutum* L.

Breeding. Pureline. SP225. GP-907. Pedigree - SP156, SP177, SP179, SP205 and SP225 were developed by crossing 12 cultivars and strains of *G. hirsutum* with *G. barbadense*, *G. tomentosum*, *G. mustelinum*, and *G. darwinii*. The entries in *G. hirsutum* include Auburn M., Carolina Queen, ST213, DPSM, Coker 413, DP523, ST508-9117, TH149-20, PD2165, Ga.H.T., Atlas(AxC)-261, and Mo.61-470. Crosses were made at Raleigh, NC. The population of hybrid progenies underwent 11 generations of random mating. The population was advanced at Stoneville, MS. Progeny evaluation and selection was conducted at two locations with two replicates each at Stoneville, MS in 2005. Selected progeny lines were further tested in replicated trials at Stoneville, MS in 2006 and 2007. Averaged over locations and years, lint yields of SP179 and SP225 were 1221 and 1348 kg ha⁻¹, respectively, similar or equivalent to high yielding check cultivar DP555BR (1359 kg ha⁻¹). Lint percent of SP225 was 39.5%. Bundle strength of SP179 and SP225 was 233 kNmkg⁻¹ and 228 kNmkg⁻¹, respectively, superior or equivalent to that of high fiber quality check FM960B2R (227 kNmkg⁻¹). Elongation of SP179 and SP225 was 6.6% and 6.5%, respectively, superior to that of FM960B2R (5.2%). Short fiber content of these two lines (5.0%) was also superior to FM960B2R (5.4%). Fineness of SP179 was 170 mtex, similar to FM960B2R (168 mtex). However, maturity ratio of SP179 was 0.95 comparing to 0.91 for FM960B2R. Average yield of SP156, SP177, and SP205 was 1080 kg ha⁻¹, higher than the average of the check cultivars FM960B2R and PHY72 (965 kg ha⁻¹). Fiber properties of these lines were similar to the averages of FM960B2R and PHY72, 6.3% of elongation, 241 kNmkg⁻¹ of bundle strength, 14.4 mm of 50% span length, 29.9 mm 2.5% span length, and 4.9% of short fiber content. Plant height of these five SP lines ranged from 145 to 153 cm at maturity. Leaf area of the 4th fully extended leaf from top of plant ranged from 125 to 148 cm². Leaf length ranged from 12.0 to

13.8 cm. Nodes of the first fruiting branch ranged from 6.5 to 8.3. Days from planting to the first boll of the five SP lines averaged 126. Pair-wise genetic distances were estimated using molecular markers (SSR) between the five SP lines and five check cultivars, DP555BR, FM960B2R, PHY72, PM2167R, and ST4892BR. All SP lines except SP225 had less than 0.52 similarity coefficient with the check cultivars. SP225 had 0.70 similarity with DP555BR.

The following were developed by Barry Glaz, USDA, ARS, Sugarcane Field Station, Canal Point, Florida 33438, United States. Received 06/12/2008.

PI 654092. *Saccharum* sp.

Cultivar. "CP 00-1446". CV-133. Pedigree - CP 00-1446 sugarcane (a complex hybrid of *Saccharum* spp.) was selected from a cross of CP 93-1607 X CP 91-1150 made at Canal Point, FL in January 1998. Known male grandparent was CP 89-2335; and female grandparents were CP 85-1498 and CP 80-1827. Known great grandparents were CP 43-047, CP 70-1133, CP 72-2086, CP 73-1311, and CP 77-1776. Great-great grandparents were Co 281, CP 52-068, CP 56-063, CP 62-374, CP 63-588, CP 68-1022, CP 68-1067, and US 1699. Stalks of CP 00-1446 were generally red (10 R 5/8). From the ground to the top visible dewlap (dewlaps form the hinge of the blade joint in sugarcane), CP 00-1446 exhibited an average, mature stalk height of 308 cm. Mean internode length, at the ninth through the eleventh internodes from the ground was 12.7 cm. CP 00-1446 exhibited a concave-convex shaped internode at the tenth internode from the ground and a glabrous growth ring with a mean width of 3.2 mm. The root band of CP 00-1446 was 6.2 mm wide and exhibited unequally distributed rows of irregularly shaped primordia with diameters ranging from 1.5 to 2.6 mm. A dark wax layer covered the root band near the bud region. Bud furrows were present but not prominent on CP 00-1446 internodes. The buds of CP 00-1446 were green yellow (2.5 GY 8/6) with narrow ovate shapes and had no pubescence. The canopy of CP 00-1446 was curved. The mean leaf blade lengths and widths of CP 00-1446 at the top visible dewlaps were 156 and 5.0 cm, respectively. Leaf sheaths were mostly smooth with a few scattered short, stiff hairs. Older sheaths were green yellow (5 GY 7/2), and progressively younger leaf sheaths were red (10 R 5/8) and green yellow (5 GY 7/2). The majority of the dewlaps on the upper leaves of mature plants were yellow red (7.5 YR 6/2) and their shape was deltoid. Auricles were absent from CP 00-1446 stalks. The yellow red (7.5 YR 7/6) ligules of CP 00-1446 exhibited a broad subarcuate shape. Ligules sometimes had a small band of pubescence at each corner. CP 00-1446 has shown adequate resistance for commercial production in Florida to smut (caused by *Ustilago scitaminea* (Sydow & P. Sydow), brown rust (caused by *Puccinia melanocephala* H. & P. Sydow), orange rust (caused by *Puccinia kuehnii* E.J. Butler), leaf scald [caused by *Xanthomonas albilineans* Ashby, Dowson], Sugarcane mosaic virus strain E (mosaic), and ratoon stunting disease (RSD) (caused by *Clavibacter xyli* subsp. *Xyli* Davis) in Florida.

PI 654093. *Saccharum* sp.

Cultivar. "CP 00-2180". CV-134. Pedigree - CP 00-2180 sugarcane (a complex hybrid of *Saccharum* spp.) was selected from a self cross of HoCP 91-552 made at Canal Point, FL in January 1998. Male grandparent was CP 72-0356 and female grandparent was LCP 81-010. All parents and grandparents were genotypes selected for Louisiana. Great grandparents were CP 62-258, CP 63-361, CP 70-1133, and CP 74-0328. Great-great

grandparents were CP 33-224, CP 44-101, CP 50-018, CP 52-068, CP 56-063, CP 65-357, and L 62-86. Stalks of CP 00-2180 had two shades of yellow color (2.5 GY 8/2 and 2.5 GY 8/8) on stalks that were protected from the sun. Stalks exposed to the sun were yellow (5 Y 8/8) and had patches of a darker shade of yellow (2.5 Y 5/2). No growth cracks were found on internodes of CP 00-2180. Stalk height of CP 00-2180 was 325 cm. Mean internode length, at the ninth through the eleventh internodes from the ground was 15.1 cm. The mean low, middle, and upper stalk diameters of CP 00-2180 were 29.6, 25.7, and 21.8 mm, respectively. CP 00-2180 had a cylindrical shaped internode at the tenth internode from the ground and a glabrous growth ring with a mean width of 3.4 mm. The root band of CP 00-2180 had unequally distributed rows of circular primordia and had no wax layer. Bud furrows were absent from the internodes of CP 00-2180. Buds of CP 00-2180 were green yellow (2.5 GY 8/6) and were roundish with crawfish type wings at the tenth internode, and there was no bud pubescence. The canopy of CP 00-2180 was curved. Leaf sheaths had tufts of pubescence. Leaf sheaths on younger leaves were green yellow (2.5 GY 8/4) and on older leaves were yellow (2.5 Y 8/4). Dewlaps on mature plants of CP 00-2180 were two shades of yellow (2.5 Y 6/2 and 2.5 Y 5/2) and their shape was squarish deltoid. The auricle shapes for CP 00-2180 were deltoid on one side and straight transitional on the opposite side. The ligules of CP 00-2180 were broad subarcuate. Ligules of CP 00-2180 were yellow (5Y 8/2) and had tufts of pubescence on their edges. In 2008, CP 00-2180 flowered in the third week of January. CP 00-2180 was resistant to smut (caused by *Ustilago scitaminea* (Sydow & P. Sydow), brown rust (caused by *Puccinia melanocephala* H. & P. Sydow), orange rust (caused by *Puccinia kuehnii* E.J. Butler), leaf scald [caused by *Xanthomonas albilineans* Ashby, Dowson], Sugarcane mosaic virus strain E (mosaic), and ratoon stunting disease (RSD) (caused by *Clavibacter xyli* subsp. *Xyli* Davis) in Florida.

The following were developed by Orsetti Seed Company, Inc., Hollister, California, United States. Received 06/18/2008.

PI 654094 PVPO. *Lactuca sativa* L.
Cultivar. "SCOTTSDALE". PVP 200800233.

The following were developed by Pioneer Hi-Bred International, Inc., Johnston, Iowa 50131, United States. Received 06/10/2008.

PI 654095 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHF0D". PVP 200800243.

PI 654096 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHGNF". PVP 200800244.

PI 654097 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHHRJ". PVP 200800245.

PI 654098 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHHRK". PVP 200800246.

PI 654099 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHNTV". PVP 200800247.

PI 654100 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHPAR". PVP 200800249.

PI 654101 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHR1C". PVP 200800250.

PI 654102 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHRAR". PVP 200800251.

PI 654103 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHRAT". PVP 200800252.

PI 654104 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHRCE". PVP 200800253.

PI 654105 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHTEF". PVP 200800254.

PI 654106 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHTFE". PVP 200800255.

PI 654107 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHV4M". PVP 200800256.

PI 654108 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHV6K". PVP 200800257.

PI 654109 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHV7Y". PVP 200800259.

PI 654110 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHV92". PVP 200800260.

PI 654111 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHVAM". PVP 200800261.

PI 654112 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHVNV". PVP 200800262.

PI 654113 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHW0V". PVP 200800263.

PI 654114 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHW2M". PVP 200800264.

PI 654115 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PH7HG". PVP 200800234.

PI 654116 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHGDD". PVP 200800235.

PI 654117 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHGWD". PVP 200800236.

PI 654118 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHJ8C". PVP 200800237.

PI 654119 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHNAR". PVP 200800238.

PI 654120 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHGC3". PVP 200800239.

PI 654121 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHGCC". PVP 200800240.

PI 654122 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHPNN". PVP 200800241.

PI 654123 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHV6W". PVP 200800258.

PI 654124 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHW2Z". PVP 200800265.

PI 654125 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHW3G". PVP 200800266.

PI 654126 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHW5F". PVP 200800267.

PI 654127 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHWEJ". PVP 200800268.

PI 654128 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHWMK". PVP 200800269.

PI 654129 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHWNY". PVP 200800270.

PI 654130 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHF3D". PVP 200800287.

PI 654131 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHH05". PVP 200800288.

PI 654132 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHHEN". PVP 200800289.

PI 654133 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHHMD". PVP 200800290.

PI 654134 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHHTE". PVP 200800291.

PI 654135 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHJC0". PVP 200800292.

PI 654136 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHPCW". PVP 200800293.

PI 654137 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHPJD". PVP 200800294.

PI 654138 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHR1J". PVP 200800295.

PI 654139 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHR3J". PVP 200800296.

PI 654140 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHRJJB". PVP 200800297.

PI 654141 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHW1W". PVP 200800298.

The following were collected by Sergey Shuvalov, N.I. Vavilov Research Institute of Plant Industry, Foreign Relations, 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 654142. *Triticum aestivum* L. subsp. *aestivum*
Landrace. TJK04-3; NSGC 17491. Collected 07/15/2004 in Tajikistan.
Latitude 38° 22' 41" N. Longitude 68° 42' 29" E. Elevation 842
m. Old state farm (Khosilot) on the road about - 21 km S of Dushanbe on
road to Esanboy. Unirrigated former state farm growing wheat, cotton and
barley-now private.

PI 654143. *Triticum aestivum* L. subsp. *aestivum*
Landrace. TJK04-4; NSGC 17492. Collected 07/15/2004 in Tajikistan.
Latitude 38° 22' 41" N. Longitude 68° 42' 29" E. Elevation 842
m. Old state farm (Khosilot) on the road about - 21 km S of Dushanbe on
road to Esanboy. Unirrigated former state farm growing wheat, cotton and
barley-now private.

PI 654144. *Triticum aestivum* L. subsp. *aestivum*
Landrace. TJK04-5; NSGC 17493. Collected 07/15/2004 in Tajikistan.
Latitude 38° 22' 41" N. Longitude 68° 42' 29" E. Elevation 842
m. Old state farm (Khosilot) on the road about - 21 km S of Dushanbe on
road to Esanboy. Unirrigated former state farm growing wheat, cotton and
barley-now private.

PI 654145. *Triticum aestivum* L. subsp. *aestivum*
Landrace. TJK04-10; NSGC 17494. Collected 07/15/2004 in Tajikistan.
Latitude 38° 22' 41" N. Longitude 68° 42' 29" E. Elevation 842
m. Old state farm (Khosilot) on the road about - 21 km S of Dushanbe on
road to Esanboy. Unirrigated former state farm growing wheat, cotton and
barley-now private.

PI 654146. *Triticum aestivum* L. subsp. *aestivum*
Landrace. TJK04-30; NSGC 17495. Collected 07/16/2004 in Tajikistan.
Latitude 37° 52' 58" N. Longitude 68° 16' 1" E. Elevation 523 m.
Shortugay village a few km S of Ishakabad along border river with
Uzbekistan. All accessions from Farm stores - all material irrigated
from river - local varieties.

- PI 654147. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-32; NSGC 17496. Collected 07/16/2004 in Tajikistan.
Latitude 37° 39' 41" N. Longitude 68° 8' 23" E. Elevation 457 m.
Yangibod village 30 km S of Shortugay village along Uzbek border.
Material taken from several farm stores. Irrigated village.
- PI 654148. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-35; NSGC 17497. Collected 07/16/2004 in Tajikistan.
Latitude 37° 39' 41" N. Longitude 68° 8' 23" E. Elevation 457 m.
Yangibod village 30 km S of Shortugay village along Uzbek border.
Material taken from several farm stores. Irrigated village.
- PI 654149. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-42; NSGC 17498. Collected 07/16/2004 in Tajikistan.
Latitude 37° 30' 36" N. Longitude 68° 3' 57" E. Elevation 373 m.
Threshing site - road side - 6 km northwest of Kolkhozabad - just after
turnoff from Shaartuz. Material collected from threshing floor - as yet
unthreshed.
- PI 654150. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-45; NSGC 17499. Collected 07/16/2004 in Tajikistan.
Latitude 37° 30' 36" N. Longitude 68° 3' 57" E. Elevation 373 m.
Threshing site - road side - 6 km northwest of Kolkhozabad - just after
turnoff from Shaartuz. Material collected from threshing floor - as yet
unthreshed.
- PI 654151. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-46; NSGC 17500. Collected 07/16/2004 in Tajikistan.
Latitude 37° 30' 36" N. Longitude 68° 3' 57" E. Elevation 373 m.
Threshing site - road side - 6 km northwest of Kolkhozabad - just after
turnoff from Shaartuz. Material collected from threshing floor - as yet
unthreshed.
- PI 654152. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-59; NSGC 17501. Collected 07/17/2004 in Tajikistan.
Latitude 38° 1' 41" N. Longitude 69° 10' 13" E. Elevation 784 m.
Pasingach village - 53 NE of Kuzgantyube town - farm store material.
Landrace wheat from farm store.
- PI 654153. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-60; NSGC 17502. Collected 07/17/2004 in Tajikistan.
Latitude 38° 1' 41" N. Longitude 69° 10' 13" E. Elevation 784 m.
Pasingach village - 53 NE of Kuzgantyube town - farm store material.
Landrace wheat from farm store.
- PI 654154. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-63; NSGC 17503. Collected 07/17/2004 in Tajikistan.
Latitude 38° 3' 55" N. Longitude 69° 17' 13" E. Elevation 653 m.
Sargazan village - 10 km northeast of Lakhur village. Farm stores - 2
taken from village in 20km radius - dry cultivation.
- PI 654155. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-64; NSGC 17504. Collected 07/17/2004 in Tajikistan.
Latitude 38° 3' 55" N. Longitude 69° 17' 13" E. Elevation 653 m.
Sargazan village - 10 km northeast of Lakhur village. Farm stores - 2
taken from village in 20km radius - dry cultivation.

- PI 654156. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-65; NSGC 17505. Collected 07/17/2004 in Tajikistan.
Latitude 38° 7' 59" N. Longitude 69° 12' 18" E. Sharshar
village, 20 km NW Sargazon. Farm store.
- PI 654157. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-66; NSGC 17506. Collected 07/17/2004 in Tajikistan.
Latitude 37° 55' 30" N. Longitude 69° 20' 17" E. Ouziken
village. 30 km SE Sargazon. Farm store.
- PI 654158. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-78; NSGC 17507. Collected 07/17/2004 in Tajikistan.
Latitude 38° 10' 42" N. Longitude 69° 28' 32" E. Elevation 753
m. Near Dakhaninamak village 4 km on from Garghara village - on road
threshing site. Dry unirrigated land.
- PI 654159. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-90; NSGC 17508. Collected 07/17/2004 in Tajikistan.
Latitude 38° 10' 54" N. Longitude 69° 32' 58" E. Elevation 1029
m. Chilcha village 20 km E of Dakhaninamak village, Khatlon (Temurmaliq
region). Threshed material obtained from farm stores at village. Non
irrigated material.
- PI 654160. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-91; NSGC 17509. Collected 07/17/2004 in Tajikistan.
Latitude 38° 10' 54" N. Longitude 69° 32' 58" E. Elevation 1029
m. Chilcha village 20 km E of Dakhaninamak village, Khatlon (Temurmaliq
region). Threshed material obtained from farm stores at village. Non
irrigated material.
- PI 654161. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-92; NSGC 17510. Collected 07/17/2004 in Tajikistan.
Latitude 38° 10' 54" N. Longitude 69° 32' 58" E. Elevation 1029
m. Chilcha village 20 km E of Dakhaninamak village, Khatlon (Temurmaliq
region). Threshed material obtained from farm stores at village. Non
irrigated material.
- PI 654162. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-99; NSGC 17511. Collected 07/17/2004 in Tajikistan.
Latitude 38° 9' 39" N. Longitude 69° 34' 43" E. Elevation 1035
m. Fields of Oftobrya village 7 km from Chilcha village. Non irrigated
flax seed fields.
- PI 654163. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-105; NSGC 17512. Collected 07/17/2004 in Tajikistan.
Latitude 38° 9' 39" N. Longitude 69° 34' 43" E. Elevation 1035
m. Fields of Oftobrya village 7 km from Chilcha village. Non irrigated
flax seed fields.
- PI 654164. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-106; NSGC 17513. Collected 07/17/2004 in Tajikistan.
Latitude 38° 9' 39" N. Longitude 69° 34' 43" E. Elevation 1035
m. Fields of Oftobrya village 7 km from Chilcha village. Non irrigated
flax seed fields.
- PI 654165. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-107; NSGC 17514. Collected 07/17/2004 in Tajikistan.

Latitude 38° 9' 39" N. Longitude 69° 34' 43" E. Elevation 1035 m. Fields of Oftobruya village 7 km from Chilcha village. Non irrigated flax seed fields.

PI 654166. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK04-112; NSGC 17515. Collected 07/18/2004 in Tajikistan. Latitude 37° 58' 47" N. Longitude 69° 34' 37" E. Elevation 611 m. Tanobchi village 15 km on from Dzhorubkul village heading towards Mumenabad. Threshing site.

PI 654167. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK04-129; NSGC 17516. Collected 07/18/2004 in Tajikistan. Latitude 37° 45' 22" N. Longitude 69° 48' 43" E. Elevation 1130 m. Aprox 5 km NE of Margobi - and 5 km NE of Garab-Dara village in the Sarchashma group. SE facing slope (16 - 30%) - very dry.

PI 654168. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK04-138; NSGC 17517. Collected 07/18/2004 in Tajikistan. Latitude 37° 45' 20" N. Longitude 69° 50' 16" E. Elevation 1098 m. Sarchasma village a few km from site 22. Materials taken from farm stores. Pisum, chickpea, lentil and wheat -grown in dry site.

PI 654169. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK04-142; NSGC 17518. Collected 07/18/2004 in Tajikistan. Latitude 37° 49' 59" N. Longitude 69° 58' 51" E. Elevation 1980 m. Zulmobad village 24 km from Sarchasma village group center - heading towards Shurabad. Weedy wheat fields and road side environments.

PI 654170. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK04-151; NSGC 17519. Collected 07/19/2004 in Tajikistan. Latitude 37° 53' 30" N. Longitude 70° 10' 4" E. Elevation 804 m. Kmirmandzhoy E of village on Pyange river -27 km NE of Shurobad. Farm stores.

PI 654171. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK04-153; NSGC 17520. Collected 07/19/2004 in Tajikistan. Latitude 37° 53' 30" N. Longitude 70° 10' 4" E. Elevation 804 m. Kmirmandzhoy E of village on Pyange river -27 km NE of Shurobad. Farm stores.

PI 654172. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK04-155; NSGC 17521. Collected 07/19/2004 in Tajikistan. Latitude 37° 53' 30" N. Longitude 70° 10' 4" E. Elevation 804 m. Kmirmandzhoy E of village on Pyange river -27 km NE of Shurobad. Farm stores.

PI 654173. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK04-170; NSGC 17522. Collected 07/19/2004 in Tajikistan. Latitude 37° 59' 8" N. Longitude 70° 12' 23" E. Elevation 1000 m. Khordara village 5 km N of Dashtidzum village. Farm store - non irrigated material.

PI 654174. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK04-180; NSGC 17523. Collected 07/19/2004 in Tajikistan. Latitude 38° 1' 36" N. Longitude 70° 12' 55" E. Elevation 1074 m. Dashtidzum village 5.6 km NE of Korjdara village. Threshed farm store material - dry cultivation.

- PI 654175. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-184; NSGC 17524. Collected 07/19/2004 in Tajikistan.
Latitude 38° 1' 36" N. Longitude 70° 12' 55" E. Elevation 1074
m. Dashtidzum village 5.6 km NE of Korjdara village. Threshed farm store
material - dry cultivation.
- PI 654176. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-188; NSGC 17525. Collected 07/19/2004 in Tajikistan.
Latitude 38° 1' 36" N. Longitude 70° 12' 55" E. Elevation 1074
m. Dashtidzum village 5.6 km NE of Korjdara village. Threshed farm store
material - dry cultivation.
- PI 654177. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-189; NSGC 17526. Collected 07/20/2004 in Tajikistan.
Latitude 37° 53' 50" N. Longitude 70° 1' 44" E. Elevation 1962
m. 6 km NW of Shurobad on the road to Muminobad village. Dagistan state
farm. Weedy cultivated wheat field - stoney loam.
- PI 654178. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-190; NSGC 19527; NSGC 17527. Collected 07/20/2004 in
Tajikistan. Latitude 37° 53' 50" N. Longitude 70° 1' 44" E.
Elevation 1962 m. 6 km NW of Shurobad on the road to Muminobad village.
Dagistan state farm. Weedy cultivated wheat field - stoney loam.
- PI 654179. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-192; NSGC 17528. Collected 07/20/2004 in Tajikistan.
Latitude 37° 53' 50" N. Longitude 70° 1' 44" E. Elevation 1962
m. 6 km NW of Shurobad on the road to Muminobad village. Dagistan state
farm. Weedy cultivated wheat field - stoney loam.
- PI 654180. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-197; NSGC 17529. Collected 07/20/2004 in Tajikistan.
Latitude 37° 53' 50" N. Longitude 70° 1' 44" E. Elevation 1962
m. 6 km NW of Shurobad on the road to Muminobad village. Dagistan state
farm. Weedy cultivated wheat field - stoney loam.
- PI 654181. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-204; NSGC 17530. Collected 07/20/2004 in Tajikistan.
Latitude 37° 53' 50" N. Longitude 70° 1' 44" E. Elevation 1962
m. 6 km NW of Shurobad on the road to Muminobad village. Dagistan state
farm. Weedy cultivated wheat field - stoney loam.
- PI 654182. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. TJK04-205; NSGC 17531. Collected 07/20/2004 in Tajikistan.
Latitude 37° 53' 50" N. Longitude 70° 1' 44" E. Elevation 1962
m. 6 km NW of Shurobad on the road to Muminobad village. Dagistan state
farm. Weedy cultivated wheat field - stoney loam.
- PI 654183. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-216; NSGC 17532. Collected 07/21/2004 in Tajikistan.
Latitude 38° 3' 41" N. Longitude 70° 1' E. Elevation 1274 m.
Sarimaydon village 10 km NE of site TJK04:37 on rd to Muminobad. Village
farm stores.
- PI 654184. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK04-223; NSGC 17533. Collected 07/21/2004 in Tajikistan.

Latitude 38° 3' 41" N. Longitude 70° 1' E. Elevation 1274 m.
Sarimaydon vilalge 10 km NE of col site TJK04:37 on the way to Muminobod.
Weedy wheat and forage fields adjacent to Sarimaydon village.

PI 654185. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK04-235; NSGC 17534. Collected 07/21/2004 in Tajikistan.
Latitude 38° 6' 36" N. Longitude 70° 2' 6" E. Elevation 1254 m.
Leningrad township market place - 50 km from Shurobad. Market.

PI 654186. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK04-237; NSGC 17535. Collected 07/21/2004 in Tajikistan.
Latitude 38° 6' 36" N. Longitude 70° 2' 6" E. Elevation 1254 m.
Leningrad township market place - 50 km from Shurobad. Market.

PI 654187. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK04-242; NSGC 17536. Collected 07/21/2004 in Tajikistan.
Latitude 38° 10' 47" N. Longitude 70° 3' 2" E. Elevation 1315 m.
9 km N of Leningrad next to small creek near Leejak village. Weedy
wheat and barley fields.

PI 654188. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK04-243; NSGC 17537. Collected 07/21/2004 in Tajikistan.
Latitude 38° 10' 47" N. Longitude 70° 3' 2" E. Elevation 1315 m.
9 km N of Leningrad next to small creek near Leejak village. Weedy
wheat and barley fields.

PI 654189. *Triticum turgidum* subsp. *durum* (Desf.) Husn.

Landrace. TJK04-245; NSGC 17538. Collected 07/21/2004 in Tajikistan.
Latitude 38° 10' 47" N. Longitude 70° 3' 2" E. Elevation 1315 m.
9 km N of Leningrad next to small creek near Leejak village. Weedy
wheat and barley fields.

PI 654190. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK04-249; NSGC 17539. Collected 07/21/2004 in Tajikistan.
Latitude 38° 10' 47" N. Longitude 70° 3' 2" E. Elevation 1315 m.
9 km N of Leningrad next to small creek near Leejak village. Weedy
wheat and barley fields.

PI 654191. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK04-284; NSGC 17540. Collected 07/22/2004 in Tajikistan.
Latitude 38° 21' 16" N. Longitude 69° 58' 36" E. Elevation 1268
m. Field adjacent to Khovaling township agricultural research station.
Cultivated field with volunteer chickpeas.

PI 654192. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK04-287; NSGC 17541. Collected 07/22/2004 in Tajikistan.
Latitude 39° 22' 9" N. Longitude 70° 1' E. Elevation 1515 m.
Farm 5 km NE of Khovaling agriculture department building - fields.
Material taken from cultivated wheat field, field margins and from
within adjacent orchar.

PI 654193. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK04-296; NSGC 17542. Collected 07/22/2004 in Tajikistan.
Latitude 39° 22' 9" N. Longitude 70° 1' E. Elevation 1515 m.
Farm 5 km NE of Khovaling agriculture department building - fields.
Material taken from cultivated wheat field, field margins and from
within adjacent orchar.

- PI 654194. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK04-298; NSGC 17543. Collected 07/22/2004 in Tajikistan.
 Latitude 39° 22' 9" N. Longitude 70° 1' E. Elevation 1515 m.
 Farm 5 km NE of Khovaling agriculture department building - fields.
 Material taken from cultivated wheat field, field margins and from
 within adjacent orchard.
- PI 654195. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK04-299; NSGC 17544. Collected 07/22/2004 in Tajikistan.
 Latitude 39° 22' 9" N. Longitude 70° 1' E. Elevation 1515 m.
 Farm 5 km NE of Khovaling agriculture department building - fields.
 Material taken from cultivated wheat field, field margins and from
 within adjacent orchard.
- PI 654196. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK04-310; NSGC 17545. Collected 07/23/2004 in Tajikistan.
 Latitude 38° 27' 24" N. Longitude 70° 3' 23" E. Elevation 1796
 m. Marzori-Sultan village 16 km NE of Khovaling on the Marzori river.
 Chickpea and wheat fields and margins.
- PI 654197. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK04-321; NSGC 17546. Collected 07/23/2004 in Tajikistan.
 Latitude 38° 27' 24" N. Longitude 70° 3' 23" E. Elevation 1796
 m. Marzori-Sultan village 16 km NE of Khovaling on the Marzori river.
 Chickpea and wheat fields and margins.
- PI 654198. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK04-238; NSGC 17547. Collected 07/23/2004 in Tajikistan.
 Latitude 38° 15' 33" N. Longitude 69° 49' 53" E. Elevation 1562
 m. 23 km SW out of Khovaling on the rd to Balkzmuwan township. Weedy
 fields on each side of road and thier margins.
- PI 654199. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK04-330; NSGC 17548. Collected 07/23/2004 in Tajikistan.
 Latitude 38° 15' 33" N. Longitude 69° 49' 53" E. Elevation 1562
 m. 23 km SW out of Khovaling on the rd to Balkzmuwan township. Weedy
 fields on each side of road and thier margins.
- PI 654200. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK04-345; NSGC 17549. Collected 07/23/2004 in Tajikistan.
 Latitude 38° 20' 55" N. Longitude 69° 34' 35" E. Elevation 1542
 m. Hudzhamitoboni village 20 km from Baldzmuwon town, Khatlon. Farm
 store - local varieties.
- PI 654201. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK04-369; NSGC 17550. Collected 07/24/2004 in Tajikistan.
 Latitude 38° 22' 39" N. Longitude 69° 12' 29" E. Elevation 660
 m. Chalchal village on west side of Vakhsh river 4 km S of bridge at
 Nurek. Farm store.
- PI 654202. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK04-379; NSGC 17551. Collected 07/25/2004 in Tajikistan.
 Latitude 38° 27' 47" N. Longitude 69° 10' 51" E. Elevation 1513
 m. 6 km on from site TJK04:55, 14 km from Nurek - heading NW towards
 Vakhdad township. Mountain grassland, dry, heavily grazed.

- PI 654203. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK04-383; NSGC 17552. Collected 07/25/2004 in Tajikistan.
 Latitude 38° 41' 32" N. Longitude 69° 19' 7" E. Elevation 1486
 m. 7 km from Ramit heading up mountain rd to Lashkharf settlement. Small
 weedy cultivated wheat field - very steep.
- PI 654204. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK04-384; NSGC 17553. Collected 07/25/2004 in Tajikistan.
 Latitude 38° 41' 32" N. Longitude 69° 19' 7" E. Elevation 1486
 m. 7 km from Ramit heading up mountain rd to Lashkharf settlement. Small
 weedy cultivated wheat field - very steep.
- PI 654205. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK04-385; NSGC 17554. Collected 07/25/2004 in Tajikistan.
 Latitude 38° 41' 32" N. Longitude 69° 19' 7" E. Elevation 1486
 m. 7 km from Ramit heading up mountain rd to Lashkharf settlement. Small
 weedy cultivated wheat field - very steep.
- PI 654206. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK04-386; NSGC 17555. Collected 07/25/2004 in Tajikistan.
 Latitude 38° 41' 32" N. Longitude 69° 19' 7" E. Elevation 1486
 m. 7 km from Ramit heading up mountain rd to Lashkharf settlement. Small
 weedy cultivated wheat field - very steep.
- PI 654207. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK04-396; NSGC 17556. Collected 07/25/2004 in Tajikistan.
 Latitude 38° 41' 32" N. Longitude 69° 19' 7" E. Elevation 1486
 m. 7 km from Ramit heading up mountain rd to Lashkharf settlement. Small
 weedy cultivated wheat field - very steep.
- PI 654208. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK04-397; NSGC 17557. Collected 07/25/2004 in Tajikistan.
 Latitude 38° 41' 32" N. Longitude 69° 19' 7" E. Elevation 1486
 m. 7 km from Ramit heading up mountain rd to Lashkharf settlement. Small
 weedy cultivated wheat field - very steep.
- PI 654209. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK04-403; NSGC 17558. Collected 07/25/2004 in Tajikistan.
 Latitude 38° 40' 24" N. Longitude 69° 19' 43" E. Elevation 1585
 m. Loshkharf settlement - 11 km from Ramit up very steep mountain roads.
 Very isolated settlement - rainfed cultivation. Material from farm store.
- PI 654210. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK04-404; NSGC 17559. Collected 07/25/2004 in Tajikistan.
 Latitude 38° 40' 24" N. Longitude 69° 19' 43" E. Elevation 1585
 m. Loshkharf settlement - 11 km from Ramit up very steep mountain roads.
 Very isolated settlement - rainfed cultivation. Material from farm store.
- PI 654211. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK04-407; NSGC 17560. Collected 07/25/2004 in Tajikistan.
 Latitude 38° 40' 24" N. Longitude 69° 19' 43" E. Elevation 1585
 m. Loshkharf settlement - 11 km from Ramit up very steep mountain roads.
 Very isolated settlement - rainfed cultivation. Material from farm store.
- PI 654212. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK04-420; NSGC 17561. Collected 07/26/2004 in Tajikistan.
 Latitude 39° 2' 39" N. Longitude 68° 49' 27" E. Elevation 2100

m. Zidee village - 65 up the Varzob river valley from the Dushanbe quarantine office. Farm stores.

PI 654213. *Triticum turgidum* subsp. *durum* (Desf.) Husn.

Landrace. TJK04-71; NSGC 17562. Collected 07/17/2004 in Tajikistan. Latitude 38° 6' 15" N. Longitude 69° 21' 38" E. Elevation 712 m. Threshing site about 1.5 km from Dagara market place on road to Kangurt village.

PI 654214. *Triticum turgidum* subsp. *durum* (Desf.) Husn.

Landrace. TJK04-77; NSGC 17563. Collected 07/17/2004 in Tajikistan. Latitude 38° 10' 42" N. Longitude 69° 28' 32" E. Elevation 753 m. Near Dakhaninamak village 4 km on from Garghara village - on road threshing site. Non irrigated fields.

PI 654215. *Triticum turgidum* subsp. *durum* (Desf.) Husn.

Landrace. TJK04-300; NSGC 17564. Collected 07/22/2004 in Tajikistan. Latitude 39° 22' 9" N. Longitude 39° 22' 9" E. Elevation 1515 m. Farm 5 km NE of Khovaling agriculture department building - fields. Material taken from cultivated wheat field, field margins and from within adjacent orchard.

PI 654216. *Triticum turgidum* subsp. *durum* (Desf.) Husn.

Landrace. TJK04-324; NSGC 17565. Collected 07/23/2004 in Tajikistan. Latitude 38° 27' 24" N. Longitude 70° 3' 23" E. Elevation 1796 m. Marzori-Sultan village 16 km NE of Khavaling on the Marzori river. Chickpea and wheat fields and margins.

The following were collected by Barbara Hellier, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Sergey Shuvalov, N.I. Vavilov Research Institute of Plant Industry, Foreign Relations, 42-44, Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Ken Street, ICARDA, Aleppo, Syria; Zebuniso Muminshoeva, Tajik Agricultural Academy, Tajikistan; Farkhod Kosimov, Scientific Research - Farming, Tajikistan; Natalya Rukhkyan, Institute of Botany, Apt. 11, Nalbandyan 47, Yerevan, Armenia; John Sheppard, Leslie Research Centre, P.O. Box 2282, Toowoomba, Queensland 4350, Australia; Shakhlo Safarzoda, N.A. Maksumov Sci. Res.-Production Center "Ziroatkor", Scientific Research Institute of Farming, Dushanbe, Tajikistan. Received 08/07/2006.

PI 654217. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:003; NSGC 18202. Collected 06/19/2006 in Khujand, Tajikistan. Latitude 39° 2' 42" N. Longitude 68° 49' 34" E. Elevation 2032 m. Ziddi village; Varzob region.

PI 654218. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:016; NSGC 18206. Collected 06/21/2006 in Khujand, Tajikistan. Latitude 39° 48' 4" N. Longitude 68° 53' 35" E. Elevation 1373 m. 9km after Shakhriston village towards Istaravshan (Ura-Tyube); Shakhriston region. rainfed fields. Safedak type.

PI 654219. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:020; NSGC 18209. Collected 06/22/2006 in Khujand, Tajikistan. Latitude 40° 12' 28" N. Longitude 69° 40' 52" E.

Elevation 462 m. Sughd test station of the Institute of Agriculture (Ziroatkor); Istaravshan region.

PI 654220. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:027; NSGC 18213. Collected 06/24/2006 in Khujand, Tajikistan. Latitude 40° 41' 20" N. Longitude 70° 18' 57" E. Elevation 961 m. 4km from the center of Shaydon village; field along the left bank of Panghazsay River; Asht region. irrigated fields of farmer Furkat Normatov.

PI 654221. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:028; NSGC 18214. Collected 06/24/2006 in Khujand, Tajikistan. Latitude 40° 41' 20" N. Longitude 70° 18' 57" E. Elevation 961 m. 4km from the center of Shaydon village; field along the left bank of Panghazsay River; Asht region. irrigated fields of farmer Furkat Normatov.

PI 654222. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:029; NSGC 18215. Collected 06/24/2006 in Khujand, Tajikistan. Latitude 40° 41' 20" N. Longitude 70° 18' 57" E. Elevation 961 m. 4km from the center of Shaydon village; field along the left bank of Panghazsay River; Asht region. irrigated fields of farmer Furkat Normatov.

PI 654223. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:031; NSGC 18216. Collected 06/24/2006 in Khujand, Tajikistan. Latitude 40° 41' 20" N. Longitude 70° 18' 57" E. Elevation 961 m. 4km from the center of Shaydon village; field along the left bank of Panghazsay River; Asht region. irrigated fields of farmer Furkat Normatov.

PI 654224. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:032; NSGC 18217. Collected 06/24/2006 in Khujand, Tajikistan. Latitude 40° 41' 20" N. Longitude 70° 18' 57" E. Elevation 961 m. 4km from the center of Shaydon village; field along the left bank of Panghazsay River; Asht region. irrigated fields of farmer Furkat Normatov.

PI 654225. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:033; NSGC 18218. Collected 06/24/2006 in Khujand, Tajikistan. Latitude 40° 41' 20" N. Longitude 70° 18' 57" E. Elevation 961 m. 4km from the center of Shaydon village; field along the left bank of Panghazsay River; Asht region. irrigated fields of farmer Furkat Normatov.

PI 654226. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:034; NSGC 18219. Collected 06/24/2006 in Khujand, Tajikistan. Latitude 40° 41' 20" N. Longitude 70° 18' 57" E. Elevation 961 m. 4km from the center of Shaydon village; field along the left bank of Panghazsay River; Asht region. irrigated fields of farmer Furkat Normatov.

PI 654227. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:035; NSGC 18220. Collected 06/24/2006 in Khujand, Tajikistan. Latitude 40° 41' 20" N. Longitude 70° 18' 57" E. Elevation 961 m. 4km from the center of Shaydon village; field along the

left bank of Panghazsay River; Asht region. irrigated fields of farmer Furkat Normatov.

PI 654228. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:037; NSGC 18221. Collected 06/24/2006 in Khujand, Tajikistan. Latitude 40° 41' 20" N. Longitude 70° 18' 57" E. Elevation 961 m. 4km from the center of Shaydon village; field along the left bank of Panghazsay River; Asht region. irrigated fields of farmer Furkat Normatov.

PI 654229. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:038; NSGC 18222. Collected 06/24/2006 in Khujand, Tajikistan. Latitude 40° 41' 20" N. Longitude 70° 18' 57" E. Elevation 961 m. 4km from the center of Shaydon village; field along the left bank of Panghazsay River; Asht region. irrigated fields of farmer Furkat Normatov.

PI 654230. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:045; NSGC 18227. Collected 06/24/2006 in Khujand, Tajikistan. Latitude 40° 44' 55" N. Longitude 70° 8' 19" E. Elevation 1631 m. 1.5km from Mulomir village towards forest named after N. Uvaedulov; place named "Sunguchak"; Asht region. fields of farm named after T.Ereigitov.

PI 654231. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:050; NSGC 18229. Collected 06/24/2006 in Khujand, Tajikistan. Latitude 40° 43' 41" N. Longitude 70° 9' 13" E. Elevation 1527 m. Mulomir village; Asht region.

PI 654232. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:052; NSGC 18230. Collected 06/24/2006 in Khujand, Tajikistan. Latitude 40° 43' 41" N. Longitude 70° 9' 13" E. Elevation 1527 m. Mulomir village; Asht region.

PI 654233. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:054; NSGC 18231. Collected 06/24/2006 in Khujand, Tajikistan. Latitude 40° 43' 41" N. Longitude 70° 9' 13" E. Elevation 1527 m. Mulomir village; Asht region.

PI 654234. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:056; NSGC 18232. Collected 06/24/2006 in Khujand, Tajikistan. Latitude 40° 43' 41" N. Longitude 70° 9' 13" E. Elevation 1527 m. Mulomir village; Asht region.

PI 654235. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:098; NSGC 18235. Collected 06/24/2006 in Khujand, Tajikistan. Latitude 40° 43' 41" N. Longitude 70° 9' 13" E. Elevation 1527 m. Mulomir village; Asht region.

PI 654236. *Triticum aestivum* L. subsp. *aestivum*

Cultivated. TJK2006:077; NSGC 18239. Collected 06/25/2006 in Khujand, Tajikistan. Latitude 40° 36' N. Longitude 70° 26' 56" E. Elevation 472 m. Bulok city; Asht region. market.

PI 654237. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:083; NSGC 18243. Collected 06/25/2006 in Khujand, Tajikistan. Latitude 40° 40' 58" N. Longitude 70° 34' 11" E.

Elevation 452 m. 5.1km after turn from Oshoba towards Punuk, 1km before Khukaberdiyev; Asht region. Irrigated fields.

PI 654238. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:084; NSGC 18244. Collected 06/25/2006 in Khujand, Tajikistan. Latitude 40° 40' 58" N. Longitude 70° 34' 11" E. Elevation 452 m. 5.1km after turn from Oshoba towards Punuk, 1km before Khujaberdiyev; Asht region. irrigated fields.

PI 654239. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:085; NSGC 18245. Collected 06/25/2006 in Khujand, Tajikistan. Latitude 40° 40' 58" N. Longitude 70° 34' 11" E. Elevation 452 m. 5.1km after turn from Oshoba towards Punuk, 1km before Khukaberdiyev; Asht region. irrigated fields.

PI 654240. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:094; NSGC 18250. Collected 06/25/2006 in Khujand, Tajikistan. Latitude 40° 49' 18" N. Longitude 70° 41' 5" E. Elevation 645 m. 76 meters from turn from Dusti towards Punuk; Asht region. non-irrigated fields.

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PI 654241. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:102; NSGC 18252. Collected 06/25/2006 in Khujand, Tajikistan. Latitude 40° 48' 51" N. Longitude 70° 42' 16" E. Elevation 620 m. 1km northwest of border with Uzbekistan; Asht region. non-irrigated fields of Punuk village.

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PI 654242. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:103; NSGC 18253. Collected 06/25/2006 in Khujand, Tajikistan. Latitude 40° 48' 51" N. Longitude 70° 42' 16" E.

Elevation 620 m. 1km northwest of border with Uzbekistan; Asht region.
non-irrigated fields of Puntuk village.

PI 654243. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:107; NSGC 18255. Collected 06/25/2006 in Khujand, Tajikistan. Latitude 40° 48' 51" N. Longitude 70° 42' 16" E.
Elevation 620 m. 1km northwest of border with Uzbekistan; Asht region.
non-irrigated fields of Puntuk village.

PI 654244. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:120; NSGC 18261. Collected 06/27/2006 in Khujand, Tajikistan. Latitude 39° 58' 25" N. Longitude 70° 32' 47" E.
Elevation 1074 m. 2.5km from exit from Chorkukh towards Khojialo village; Isfara region. irrigated fields.

PI 654245. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:124; NSGC 18264. Collected 06/27/2006 in Khujand, Tajikistan. Latitude 39° 57' 47" N. Longitude 70° 31' 31" E.
Elevation 1110 m. Fields of Chorkukh village on the road towards Vorukh village, place named "Govsar"; Isfara region.

PI 654246. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:125; NSGC 18265. Collected 06/27/2006 in Khujand, Tajikistan. Latitude 39° 57' 47" N. Longitude 70° 31' 31" E.
Elevation 1110 m. Fields of Chorkukh village on the road towards Vorukh village, place named "Govsar"; Isfara region.

PI 654247. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:126; NSGC 18266. Collected 06/27/2006 in Khujand, Tajikistan. Latitude 39° 57' 47" N. Longitude 70° 31' 31" E.
Elevation 1110 m. Fields of Chorkukh village on the road towards Vorukh village, place named "Govsar"; Isfara region.

PI 654248. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:136; NSGC 18271. Collected 06/27/2006 in Khujand, Tajikistan. Latitude 39° 57' 47" N. Longitude 70° 31' 31" E.
Elevation 1110 m. Fields of Chorkukh village on the road towards Vorukh village, place named "Govsar"; Isfara region.

PI 654249. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:137; NSGC 18272. Collected 06/27/2006 in Khujand, Tajikistan. Latitude 39° 57' 47" N. Longitude 70° 31' 31" E.
Elevation 1110 m. Fields of Chorkukh village on the road towards Vorukh village, place named "Govsar"; Isfara region.

PI 654250. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:138; NSGC 18273. Collected 06/27/2006 in Khujand, Tajikistan. Latitude 39° 57' 47" N. Longitude 70° 31' 31" E.
Elevation 1110 m. Fields of Chorkukh village on the road towards Vorukh village, place named "Govsar"; Isfara region.

PI 654251. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:139; NSGC 18274. Collected 06/27/2006 in Khujand, Tajikistan. Latitude 39° 57' 47" N. Longitude 70° 31' 31" E.
Elevation 1110 m. Fields of Chorkukh village on the road towards Vorukh village, place named "Govsar"; Isfara region.

- PI 654252. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK2006:140; NSGC 18275. Collected 06/27/2006 in Khujand, Tajikistan. Latitude 39° 57' 47" N. Longitude 70° 31' 31" E. Elevation 1110 m. Fields of Chorkukh village on the road towards Vorukh village, place named "Govsar"; Isfara region.
- PI 654253. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK2006:158; NSGC 18280. Collected 06/27/2006 in Khujand, Tajikistan. Latitude 39° 51' 40" N. Longitude 70° 32' 12" E. Elevation 1365 m. 2km from Aksoy village towards Vorukh; Isfara region. fields.
- PI 654254. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK2006:169; NSGC 18283. Collected 06/27/2006 in Khujand, Tajikistan. Latitude 39° 51' 5" N. Longitude 70° 33' 38" E. Elevation 1335 m. Vorukh village; Isfara region.
- PI 654255. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK2006:171; NSGC 18284. Collected 06/28/2006 in Khujand, Tajikistan. Latitude 40° 14' 53" N. Longitude 70° 4' 53" E. Elevation 375 m. Karakchikum village; Konibodom region. fields.
- PI 654256. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK2006:172; NSGC 18285. Collected 06/28/2006 in Khujand, Tajikistan. Latitude 40° 14' 53" N. Longitude 70° 4' 53" E. Elevation 375 m. Karakchikum village; Konibodom region. fields.
- PI 654257. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK2006:182; NSGC 18290. Collected 06/28/2006 in Khujand, Tajikistan. Latitude 40° 7' 30" N. Longitude 69° 13' 57" E. Elevation 479 m. 4km after Kurkat village towards Istaravshan city; Istaravshan region. fields.
- PI 654258. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK2006:183; NSGC 18291. Collected 06/28/2006 in Khujand, Tajikistan. Latitude 40° 7' 30" N. Longitude 69° 13' 57" E. Elevation 479 m. 4km after Kurkat village towards Istaravshan city; Istaravshan region. fields.
- PI 654259. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK2006:184; NSGC 18292. Collected 06/28/2006 in Khujand, Tajikistan. Latitude 40° 7' 30" N. Longitude 69° 13' 57" E. Elevation 479 m. 4km after Kurkat village towards Istaravshan city; Istaravshan region. fields.
- PI 654260. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK2006:186; NSGC 18294. Collected 06/28/2006 in Khujand, Tajikistan. Latitude 40° 7' 30" N. Longitude 69° 13' 57" E. Elevation 479 m. 4km after Kurkat village towards Istaravshan city; Istaravshan region. fields.
- PI 654261. *Triticum aestivum* L. subsp. *aestivum***
 Landrace. TJK2006:201; NSGC 18305. Collected 06/29/2006 in Khujand, Tajikistan. Turnoff main road from Kemkul sign; 5.6km from central administration building of Shakhriston city.

PI 654262. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:202; NSGC 18306. Collected 06/29/2006 in Khujand, Tajikistan. Turnoff main road from Kemkul sign; 5.6km from central administration building of Shakhriston city.

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PI 654263. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:203; NSGC 18307. Collected 06/29/2006 in Khujand, Tajikistan. Turnoff main road from Kemkul sign; 5.6km from central administration building of Shakhriston city.

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PI 654264. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:204; NSGC 18308. Collected 06/29/2006 in Khujand, Tajikistan. Turnoff main road from Kemkul sign; 5.6km from central administration building of Shakhriston city.

PI 654265. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:205; NSGC 18309. Collected 06/29/2006 in Khujand, Tajikistan. Turnoff main road from Kemkul sign; 5.6km from central administration building of Shakhriston city.

PI 654266. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:215; NSGC 18313. Collected 06/30/2006 in Khujand, Tajikistan. Latitude 39° 27' 6" N. Longitude 68° 21' 12" E. Elevation 1323 m. Veshkend village; Ayni region.

PI 654267. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:217; NSGC 18314. Collected 06/30/2006 in Khujand, Tajikistan. Latitude 39° 27' 6" N. Longitude 68° 21' 12" E. Elevation 1323 m. Veshkend village; Ayni region.

- PI 654268. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:218; NSGC 18315. Collected 06/30/2006 in Khujand, Tajikistan. Latitude 39° 27' 6" N. Longitude 68° 21' 12" E. Elevation 1323 m. Veshkend village; Ayni region.
- PI 654269. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:219; NSGC 18316. Collected 06/30/2006 in Khujand, Tajikistan. Latitude 39° 27' 6" N. Longitude 68° 21' 12" E. Elevation 1323 m. Veshkend village; Ayni region.
- PI 654270. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:220; NSGC 18317. Collected 06/30/2006 in Khujand, Tajikistan. Latitude 39° 27' 6" N. Longitude 68° 21' 12" E. Elevation 1323 m. Veshkend village; Ayni region.
- PI 654271. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:222; NSGC 18318. Collected 06/30/2006 in Khujand, Tajikistan. Latitude 39° 27' 6" N. Longitude 68° 21' 12" E. Elevation 1323 m. Veshkend village; Ayni region.
- PI 654272. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:223; NSGC 18319. Collected 06/30/2006 in Khujand, Tajikistan. Latitude 39° 27' 6" N. Longitude 68° 21' 12" E. Elevation 1323 m. Veshkend village; Ayni region.
- PI 654273. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:224; NSGC 18320. Collected 06/30/2006 in Khujand, Tajikistan. Latitude 39° 27' 6" N. Longitude 68° 21' 12" E. Elevation 1323 m. Veshkend village; Ayni region.
- PI 654274. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:239; NSGC 18327. Collected 06/30/2006 in Khujand, Tajikistan. Latitude 39° 28' 7" N. Longitude 68° 15' 59" E. Elevation 1294 m. Urmetan village; Ayni region. non-irrigated fields.
- PI 654275. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:240; NSGC 18328. Collected 06/30/2006 in Khujand, Tajikistan. Latitude 39° 26' 7" N. Longitude 68° 15' 59" E. Elevation 1294 m. Urmetan village; Ayni region. non-irrigated fields.
- PI 654276. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:241; NSGC 18329. Collected 06/30/2006 in Khujand, Tajikistan. Latitude 39° 26' 7" N. Longitude 68° 15' 59" E. Elevation 1294 m. Urmetan village; Ayni region. non-irrigated fields.
- PI 654277. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:242; NSGC 18330. Collected 06/30/2006 in Khujand, Tajikistan. Latitude 39° 26' 7" N. Longitude 68° 15' 59" E. Elevation 1294 m. Urmetan village; Ayni region. non-irrigated fields.
- PI 654278. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:243; NSGC 18331. Collected 06/30/2006 in Khujand, Tajikistan. Latitude 39° 26' 7" N. Longitude 68° 15' 59" E. Elevation 1294 m. Urmetan village; Ayni region. non-irrigated fields.
- PI 654279. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:244; NSGC 18332. Collected 06/30/2006 in Khujand,

Tajikistan. Latitude 39° 26' 7" N. Longitude 68° 15' 59" E.
Elevation 1294 m. Urmetan village; Ayni region. non-irrigated fields.

PI 654280. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:246; NSGC 18333. Collected 06/30/2006 in Khujand, Tajikistan. Latitude 39° 26' 7" N. Longitude 68° 15' 59" E.
Elevation 1294 m. Urmetan village; Ayni region. non-irrigated fields.

PI 654281. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:248; NSGC 18334. Collected 06/30/2006 in Khujand, Tajikistan. Latitude 39° 26' 7" N. Longitude 68° 15' 59" E.
Elevation 1294 m. Urmetan village; Ayni region. non-irrigated fields.

PI 654282. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:250; NSGC 18335. Collected 06/30/2006 in Khujand, Tajikistan. Latitude 39° 26' 7" N. Longitude 68° 15' 59" E.
Elevation 1294 m. Urmetan village; Ayni region. non-irrigated fields.

PI 654283. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:274; NSGC 18342. Collected 06/30/2006 in Khujand, Tajikistan. Latitude 39° 26' 29" N. Longitude 68° 15' 56" E.
Elevation 1296 m. Urmetan village; Ayni region. non-irrigated fields.

PI 654284. *Triticum turgidum* subsp. *durum* (Desf.) Husn.

Landrace. TJK2006:285; NSGC 18343. Collected 07/01/2006 in Khujand, Tajikistan. Latitude 39° 22' 43" N. Longitude 68° 44' 18" E.
Elevation 1556 m. 1km west from Rarz village center, turnoff left 300m; Ayni region. farm storage.

PI 654285. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:286; NSGC 18344. Collected 07/01/2006 in Khujand, Tajikistan. Latitude 39° 22' 43" N. Longitude 68° 44' 18" E.
Elevation 1556 m. 1km west from Rarz village center, turnoff left 300m; Ayni region. farm storage.

PI 654286. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:290; NSGC 18346. Collected 07/01/2006 in Khujand, Tajikistan. Latitude 39° 22' 43" N. Longitude 68° 44' 18" E.
Elevation 1556 m. 1km west from Rarz village center, turnoff left 300m; Ayni region. farm storage.

PI 654287. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:291; NSGC 18347. Collected 07/01/2006 in Khujand, Tajikistan. Latitude 39° 22' 43" N. Longitude 68° 44' 18" E.
Elevation 1556 m. 1km west from Rarz village center, turnoff left 300m; Ayni region. farm storage.

PI 654288. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:292; NSGC 18348. Collected 07/01/2006 in Khujand, Tajikistan. Latitude 39° 22' 43" N. Longitude 68° 44' 18" E.
Elevation 1556 m. 1km west from Rarz village center, turnoff left 300m; Ayni region. farm storage.

PI 654289. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:294; NSGC 18349. Collected 07/01/2006 in Khujand, Tajikistan. Latitude 39° 22' 43" N. Longitude 68° 44' 18" E.

Elevation 1556 m. 1km west from Rarz village center, turnoff left 300m; Ayni region. farm storage.

PI 654290. *Triticum turgidum* subsp. *durum* (Desf.) Husn.

Landrace. TJK2006:296; NSGC 18351. Collected 07/01/2006 in Khujand, Tajikistan. Latitude 39° 22' 43" N. Longitude 68° 44' 18" E. Elevation 1556 m. 1km west from Rarz village center, turnoff left 300m; Ayni region. farm storage.

PI 654291. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:298; NSGC 18353. Collected 07/01/2006 in Khujand, Tajikistan. Latitude 39° 22' 43" N. Longitude 68° 44' 18" E. Elevation 1556 m. 1km west from Rarz village center, turnoff left 300m; Ayni region. farm storage.

PI 654292. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:304; NSGC 18355. Collected 07/01/2006 in Khujand, Tajikistan. Latitude 39° 22' 33" N. Longitude 68° 45' 4" E. Elevation 1543 m. 400m from Rarz village to east, 300m from turn; Ayni region. irrigated fields.

PI 654293. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:305; NSGC 18356. Collected 07/01/2006 in Khujand, Tajikistan. Latitude 39° 22' 33" N. Longitude 68° 45' 4" E. Elevation 1543 m. 400m from Rarz village to east, 300m from turn; Ayni region. irrigated fields.

PI 654294. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:309; NSGC 18358. Collected 07/01/2006 in Khujand, Tajikistan. Latitude 39° 22' 49" N. Longitude 68° 44' 54" E. Elevation 1558 m. Rarz village center, field behind cafe; Ayni region.

PI 654295. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:310; NSGC 18359. Collected 07/01/2006 in Khujand, Tajikistan. Latitude 39° 23' 13" N. Longitude 68° 45' 16" E. Elevation 1608 m. 1.8km from Rarz village center to Saravshan River; Ayni region.

PI 654296. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:322; NSGC 18361. Collected 07/01/2006 in Khujand, Tajikistan. Latitude 39° 22' 26" N. Longitude 68° 49' 59" E. Elevation 1609 m. 7.8km up river from Rarz village towards Pakhurd; Ayni region.

PI 654297. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:323; NSGC 18362. Collected 07/01/2006 in Khujand, Tajikistan. Latitude 39° 22' 26" N. Longitude 68° 49' 59" E. Elevation 1609 m. 7.8km up river from Rarz village towards Pakhurd; Ayni region.

PI 654298. *Triticum aestivum* L. subsp. *aestivum*

Landrace. TJK2006:324; NSGC 18363. Collected 07/01/2006 in Khujand, Tajikistan. Latitude 39° 22' 26" N. Longitude 68° 49' 59" E. Elevation 1609 m. 7.8km up river from Rarz village towards Pakhurd; Ayni region.

- PI 654299. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:325; NSGC 18364. Collected 07/01/2006 in Khujand, Tajikistan. Latitude 39° 22' 26" N. Longitude 68° 49' 59" E. Elevation 1609 m. 7.8km up river from Rarz village towards Pakhurd; Ayni region.
- PI 654300. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:326; NSGC 18365. Collected 07/01/2006 in Khujand, Tajikistan. Latitude 39° 22' 26" N. Longitude 68° 49' 59" E. Elevation 1609 m. 7.8km up river from Rarz village towards Pakhurd; Ayni region.
- PI 654301. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:328; NSGC 18366. Collected 07/01/2006 in Khujand, Tajikistan. Latitude 39° 22' 26" N. Longitude 68° 49' 59" E. Elevation 1609 m. 7.8km up river from Rarz village towards Pakhurd; Ayni region.
- PI 654302. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:334; NSGC 18368. Collected 07/02/2006 in Khujand, Tajikistan. Latitude 39° 13' 13" N. Longitude 68° 39' 58" E. Elevation 2276 m. Remon village; Ayni region.
- PI 654303. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:335; NSGC 18369. Collected 07/02/2006 in Khujand, Tajikistan. Latitude 39° 13' 13" N. Longitude 68° 39' 58" E. Elevation 2276 m. Remon village; Ayni region.
- PI 654304. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:348; NSGC 18372. Collected 07/02/2006 in Khujand, Tajikistan. Latitude 39° 9' 41" N. Longitude 68° 48' 49" E. Elevation 2098 m. Anzob village; Anyi region.
- PI 654305. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:352; NSGC 18373. Collected 07/03/2006 in Khujand, Tajikistan. Latitude 39° 12' 7" N. Longitude 69° 3' 53" E. Elevation 2533 m. Makhtimayn and Vaghanzoy villages; Anyi region.
- PI 654306. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:354; NSGC 18374. Collected 07/03/2006 in Khujand, Tajikistan. Latitude 39° 12' 7" N. Longitude 69° 3' 53" E. Elevation 2533 m. Makhtimayn and Vaghanzoy villages; Ayni region.
- PI 654307. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:359; NSGC 18377. Collected 07/03/2006 in Khujand, Tajikistan. Latitude 39° 10' 26" N. Longitude 68° 52' 48" E. Elevation 2178 m. Marge village; Ayni region.
- PI 654308. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:361; NSGC 18378. Collected 07/05/2006 in Khujand, Tajikistan. Latitude 39° 11' 13" N. Longitude 69° 13' 55" E. Kiryonte village.
- PI 654309. *Triticum aestivum* L. subsp. *aestivum***
Landrace. TJK2006:362; NSGC 18379. Collected 07/05/2006 in Khujand, Tajikistan. Latitude 39° 11' 13" N. Longitude 69° 13' 55" E. Kiryonte village.

The following were collected by Brian J. Steffenson, University of Minnesota, Department of Plant Pathology, 495 Borlaug Hall, St. Paul, Minnesota 55108-6030, United States; Taner Akar, Central Research Institute for Field Crops, P.O. Box 226, 06042 Ulus, Ankara, Turkey; Hatice Bilgic, University of Minnesota, Department of Agronomy and Plant Genetics, 411 Borlaug Hall, St. Paul, Minnesota 55108, United States; Alptekin Karagoz, Central Research Institute for Fields Crops, Plant Genetic Resources Department, Ankara, Ankara, Turkey; Ismail Sayim, Central Research Institute for Field Crops, Ankara, Ankara, Turkey. Received 06/24/2005.

- PI 654310. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-008; CRIFC-01-05-02; NSGC 18446. Collected 06/02/2005 in Urfa, Turkey. Latitude 37° 6' 5" N. Longitude 40° 5' 43" E. Elevation 450 m. Saraccesme, Ceylanpinar Farm. Open area between fields of bread wheat.
- PI 654311. *Triticum turgidum* subsp. *dicoccoides*** (Korn. ex Asch. & Graebn.) Thell.
Wild. TUR-05-BJS-HB-009; CRIFC-01-06-01; NSGC 18447. Collected 06/02/2005 in Urfa, Turkey. Latitude 36° 58' 6" N. Longitude 39° 53' 42" E. Elevation 450 m. Ceylanpinar Farm, Gurgurbaba. Slope=30%; Basalt rocky area; Grows next to hillside, valley slope large basalt blocks; Non-planted area; Basaltic Soil; *H. bulbosum* and *H. v. spontaneum* also found.
- PI 654312. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-061; CRIFC-04-07-01; NSGC 18499. Collected 06/05/2005 in Diyarbakir, Turkey. Latitude 37° 40' 1" N. Longitude 40° 28' 3" E. Elevation 720 m. 8km before Cinar on Mardin-Diyarbakir road. durum wheat field; clay-loam.
- PI 654313. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-068; CRIFC-05-01-02; NSGC 18508. Collected 06/06/2005 in Diyarbakir, Turkey. Latitude 37° 48' 44" N. Longitude 40° 20' 8" E. Elevation 600 m. 1km east of Bismil junction on Diyarbakir-Bismil road. Slope=0; Farmland & wild habitat; Clay Basalt rocks. All area covered w/ basalt rocks, small & big; *Aeg. ligustica* was green.
- PI 654314. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-072; CRIFC-05-03-01; NSGC 18512. Collected 06/06/2005 in Diyarbakir, Turkey. Latitude 37° 50' 6" N. Longitude 40° 33' 53" E. Elevation 570 m. 11km before Bismil on Diyarbakir-Bismil road. near bread wheat field; clay soil; 400mm rainfall.
- PI 654315. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-077; CRIFC-05-05-01; NSGC 18517. Collected 06/06/2005 in Diyarbakir, Turkey. Latitude 37° 54' 54" N. Longitude 40° 56' 34" E. Elevation 720 m. near Koyunlu village. roadside near lentil and wheat fields; clay loam.
- PI 654316. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-083; CRIFC-05-07-03; NSGC 18523. Collected 06/06/2005 in Diyarbakir, Turkey. Latitude 38° 7' 41" N. Longitude

40° 47' 5" E. Elevation 720 m. before Bahcecik village on
Silvan-Diyarbakir road. next to dry creek; slope=10%; black clay.

PI 654317. *Triticum turgidum* subsp. *dicoccoides* (Korn. ex Asch. & Graebn.)
Thell.

Wild. TUR-05-BJS-HB-090; CRIFC-06-02-01; NSGC 18529. Collected
06/07/2005 in Diyarbakir, Turkey. Latitude 37° 51' 19" N. Longitude
39° 48' 59" E. Elevation 1140 m. NE Karacadag Mountain. rocky,
wadis, along sides of a small creek; clay basalt.

PI 654318. *Triticum turgidum* subsp. *dicoccoides* (Korn. ex Asch. & Graebn.)
Thell.

Wild. TUR-05-BJS-HB-095; CRIFC-06-05-01; NSGC 18534. Collected
06/07/2005 in Urfa, Turkey. Latitude 37° 44' 46" N. Longitude
39° 39' 41" E. Elevation 1170 m. between Karabahce and Karacadag
villages. Large *T.dicoccoides* population mixed with
T.monococcum.aegilopoides.

PI 654319. *Triticum turgidum* subsp. *dicoccoides* (Korn. ex Asch. & Graebn.)
Thell.

Wild. TUR-05-BJS-HB-097; CRIFC-06-06-01; NSGC 18536. Collected
06/07/2005 in Urfa, Turkey. Latitude 37° 43' 7" N. Longitude 39°
35' 11" E. Elevation 1050 m. Karlik village road, entrance.

PI 654320. *Triticum monococcum* subsp. *aegilopoides* (Link) Thell.

Wild. TUR-05-BJS-HB-099; CRIFC-06-06-03; NSGC 18538. Collected
06/07/2005 in Urfa, Turkey. Latitude 37° 43' 7" N. Longitude 39°
35' 11" E. Elevation 1050 m. Karlik village road, entrance. roadside;
red clay, basalt rocks.

PI 654321. *Triticum turgidum* subsp. *dicoccoides* (Korn. ex Asch. & Graebn.)
Thell.

Wild. TUR-05-BJS-HB-102; CRIFC-06-07-02; NSGC 18541. Collected
06/07/2005 in Urfa, Turkey. Latitude 37° 43' 5" N. Longitude 39°
19' 37" E. Elevation 720 m. 4km south of Siverek on Karakecili road;
clay, red, basalt rocks.

PI 654322. *Triticum monococcum* subsp. *aegilopoides* (Link) Thell.

Wild. TUR-05-BJS-HB-103; CRIFC-06-07-03; NSGC 18542. Collected
06/07/2005 in Urfa, Turkey. Latitude 37° 43' 5" N. Longitude 39°
19' 37" E. Elevation 720 m. 4km south of Siverek on Karakecili road.

PI 654323. *Triticum monococcum* subsp. *aegilopoides* (Link) Thell.

Wild. TUR-05-BJS-HB-104; CRIFC-06-08-01; NSGC 18543. Collected
06/07/2005 in Urfa, Turkey. Latitude 37° 39' 8" N. Longitude 39°
18' 8" E. Elevation 720 m. along Karakecili road. Roadside next to
lentil fields; clay red basalt rocks.

PI 654324. *Triticum monococcum* subsp. *aegilopoides* (Link) Thell.

Wild. TUR-05-BJS-HB-106; CRIFC-06-09-02; NSGC 18545. Collected
06/07/2005 in Urfa, Turkey. Latitude 37° 29' 32" N. Longitude
39° 22' 59" E. Elevation 650 m. along Karakecili road. Roadside next
to lentil fields; clay red; basalt rock.

PI 654325. *Triticum turgidum* subsp. *dicoccoides* (Korn. ex Asch. & Graebn.)
Thell.

Wild. TUR-05-BJS-HB-107; CRIFC-06-09-03; NSGC 18546. Collected

06/07/2005 in Urfa, Turkey. Latitude 37° 29' 32" N. Longitude 39° 22' 59" E. Elevation 650 m. along Karakecili road. Roadside next to lentil field; clay red; basalt rocks.

- PI 654326. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-110; CRIFC-07-03-01; NSGC 18549. Collected 06/08/2005 in Urfa, Turkey. Latitude 37° 19' 3" N. Longitude 38° 35' 53" E. Elevation 690 m. Along Urfa-Adiyaman road.
- PI 654327. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-114; CRIFC-07-04-01; NSGC 18553. Collected 06/08/2005 in Urfa, Turkey. Latitude 37° 19' 3" N. Longitude 38° 35' 53" E. Elevation 694 m. just before Ataturk Dam on Urfa-Adiyaman road. Clay, slope 0.
- PI 654328. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-120; CRIFC-07-06-01; NSGC 18559. Collected 06/08/2005 in Adiyaman, Turkey. Latitude 37° 36' 27" N. Longitude 38° 13' 39" E. Elevation 630 m. after Ataturk Dam on Urfa-Adiyaman road. Clay, dark-red, medium stoney, probably high organic content.
- PI 654329. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-127; CRIFC-07-09-01; NSGC 18566. Collected 06/08/2005 in Adiyaman, Turkey. Latitude 37° 39' 26" N. Longitude 38° 10' 47" E. Elevation 600 m. along Adiyaman-Urfa road. Next to cotton field; red clay.
- PI 654330. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-138; CRIFC-08-03-02; NSGC 18577. Collected 06/09/2005 in Urfa, Turkey. Latitude 37° 3' 2" N. Longitude 38° 15' 12" E. Elevation 660 m. before Birecik village on Urfa-Antep road. clay; flintstones on surface.
- PI 654331. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-152; CRIFC-09-04-02; NSGC 18592. Collected 06/10/2005 in Gaziantep, Turkey. Latitude 36° 52' 52" N. Longitude 37° 35' 24" E. Elevation 570 m. 3km east of Tilbesar excavation area. Roadside; clay-lime.
- PI 654332. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-155; CRIFC-09-05-01; NSGC 18595. Collected 06/10/2005 in Gaziantep, Turkey. Latitude 36° 57' 12" N. Longitude 37° 27' 17" E. Elevation 720 m. around Gaziantep airport, Antep-Kilis road. next to durum wheat fields; clay, dark color; huge healthy plants.
- PI 654333. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-157; CRIFC-09-05-03; NSGC 18597. Collected 06/10/2005 in Gaziantep, Turkey. Latitude 36° 57' 12" N. Longitude 37° 27' 17" E. Elevation 720 m. Around Gaziantep airport, Antep-Kilis road.
- PI 654334. *Triticum turgidum* subsp. *dicoccoides*** (Korn. ex Asch. & Graebn.) Thell.
Wild. TUR-05-BJS-HB-160; CRIFC-09-07-01; NSGC 18600. Collected 06/10/2005 in Gaziantep, Turkey. Latitude 36° 52' 18" N. Longitude

37° 20' 50" E. Elevation 690 m. 30km to Kilis from Gaziantep. Clay, dark color; slope 0.

- PI 654335. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-162; CRIFC-09-07-03; NSGC 18602. Collected 06/10/2005 in Gaziantep, Turkey. Latitude 36° 52' 18" N. Longitude 37° 20' 50" E. Elevation 690 m. 30km to Kilis from Gaziantep. with *T.dicoccoides*.
- PI 654336. *Triticum turgidum* subsp. *dicoccoides*** (Korn. ex Asch. & Graebn.) Thell.
Wild. TUR-05-BJS-HB-163; CRIFC-09-08-01; NSGC 18603. Collected 06/10/2005 in Gaziantep, Turkey. Latitude 36° 52' 18" N. Longitude 37° 20' 50" E. Elevation 690 m. 2km east of Kazikli, along Antep-Kilis road. Around big basalt rocks on the border of wheat fields. Also in an open area btw fields where there was *Ae speltoides ligustics* & *T boeiticum*.
- PI 654337. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-164; CRIFC-09-08-02; NSGC 18604. Collected 06/10/2005 in Gaziantep, Turkey. Latitude 36° 52' 18" N. Longitude 37° 20' 50" E. Elevation 690 m. 2km east of Kazikli, along Antep-Kilis road.
- PI 654338. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-171; CRIFC-10-02-02; NSGC 18612. Collected 06/11/2005 in Gaziantep, Turkey. Latitude 37° 13' 45" N. Longitude 37° 30' 54" E. Elevation 780 m. 30km from Gaziantep towards Yavuzeli (N) on Antep-Yavuzeli road. around basalt rocks used to border wheat fields; clay; together with *T.dicoccoides*.
- PI 654339. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-177; CRIFC-10-03-02; NSGC 18620. Collected 06/11/2005 in Gaziantep, Turkey. Latitude 37° 13' 46" N. Longitude 37° 30' 54" E. Elevation 780 m. towards Yavuzeli on Antep-Yavuzeli road. red clay, basalt rocks.
- PI 654340. *Triticum timopheevii* subsp. *armeniacum*** (Jakubz.) Slageren
Wild. TUR-05-BJS-HB-181; CRIFC-10-05-02; NSGC 18624. Collected 06/11/2005 in Gaziantep, Turkey. Latitude 37° 21' 49" N. Longitude 37° 32' 19" E. Elevation 900 m. 10km from Yavuzeli towards Araban on Yavuzeli-Araban road. basalt rocks; clay; slope 28%.
- PI 654341. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-182; CRIFC-10-05-03; NSGC 18625. Collected 06/11/2005 in Gaziantep, Turkey. Latitude 37° 21' 49" N. Longitude 37° 32' 19" E. Elevation 900 m. 10km from Yavuzeli towards Araban on Yavuzeli-Araban road. basalt rocks; red clay.
- PI 654342. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-189; CRIFC-10-07-02; NSGC 18634. Collected 06/11/2005 in Gaziantep, Turkey. Latitude 37° 24' 10" N. Longitude 37° 34' 38" E. Elevation 570 m. near Gelinbugdayi village. next to cotton field; clay-red; basalt rocks.
- PI 654343. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-194; CRIFC-10-08-02; NSGC 18639. Collected

06/11/2005 in Gaziantep, Turkey. Latitude 37° 22' 14" N. Longitude 37° 33' 3" E. Elevation 750 m. 3km south of Gelinbugdayi village. clay, basalt rocks on slope 35-40%.

- PI 654344. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-201; CRIFC-11-02-02; NSGC 18647. Collected 06/12/2005 in Maras, Turkey. Latitude 37° 18' 46" N. Longitude 37° 10' 21" E. Elevation 870 m. 3km after Karabiyikli towards Narli on old Antep-Maras road. Large stands of *T.dicoccoides* on rocky slopes with *T. boeoticum*; dark red clay, huge basalt rocks, slope 23%.
- PI 654345. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-207; CRIFC-12-01-02; NSGC 18653. Collected 06/13/2005 in Maras, Turkey. Latitude 37° 16' 11" N. Longitude 37° 12' 2" E. Elevation 930 m. 34km from Gaziantep to Maras, 3km before Karabiyikli. 23 degree/ 43% slope, 2 types of oaks on the hill, red clay between big basalt rocks & short oak trees.
- PI 654346. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-212; CRIFC-12-03-02; NSGC 18660. Collected 06/13/2005 in Maras, Turkey. Latitude 37° 31' 8" N. Longitude 36° 59' 42" E. Elevation 540 m. Kahramanmaras University.
- PI 654347. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-220; CRIFC-12-07-01; NSGC 18669. Collected 06/13/2005 in Maras, Turkey. Latitude 37° 20' 26" N. Longitude 37° 9' 25" E. Elevation 630 m. 112km northwest of Maras. next to and in bread wheat field; red clay.
- PI 654348. *Triticum monococcum* subsp. *aegilopoides*** (Link) Thell.
Wild. TUR-05-BJS-HB-222; CRIFC-12-08-01; NSGC 18671. Collected 06/13/2005 in Maras, Turkey. Latitude 37° 19' 39" N. Longitude 37° 9' 44" E. Elevation 720 m. before Karabiyikli on old Antep-Maras road. clay-red with basalt rocks; slope 30%.

The following were donated by Fred R. Miller, Texas A & M University, Department of Soil & Crop Science, College Station, Texas 77843-2474, United States. Received 05/25/1989.

- PI 654349. *Sorghum bicolor*** (L.) Moench **subsp. *bicolor***
85T514; Grif 654; GIZA 114. Collected in Egypt.

The following were donated by Haktae Lim, Kangwon National University, Division of Applied Plant Sciences, College of Agriculture and Life Sciences, Chuncheon, Korea, South. Received 11/05/2003.

- PI 654350. *Solanum tuberosum*** L.
Cultivar. "Stick Valley"; Q 44062.

The following were donated by Kazuyoshi Hosaka, Kobe University, Food, Resources Education and Research Center, 1348 Uzurano, Kobe, Hyogo 675-2103, Japan. Received 08/16/2005.

PI 654351. *Solanum tuberosum* L.
Genetic. 97H32-6; Q 44457.

PI 654352. *Solanum tuberosum* L.
Genetic. Fl-1; Q 44458.

PI 654353. *Solanum tuberosum* L.
Genetic. 97H32-14; Q 44459.

The following were donated by Enrique Chujoy, International Potato Center (CIP), Far East and SE Asia Regional Office, Laguna, Los Banos, Luzon, Philippines. Received 08/24/2005.

PI 654354. *Solanum tuberosum* L.
Landrace. "Soliman"; Q 44481.

The following were donated by Tommy E. Carter, USDA-ARS, Soybean and Nitrogen Fixation Research, 3127 Ligon Street, Raleigh, North Carolina 27607, United States. Received 07/09/2008.

PI 654355. *Glycine max* (L.) Merr.
Cultivar. Pureline. "N8101"; SY 807001. CV-498. Pedigree - N8101 originated from the cross between small-seeded germplasm NC-114 and small-seeded cultivar 'N7101'. NC-114 was a selection from NTCPR90-143 x 'Pearl', small-seeded cultivar. NTCPR90-143 originated from the cross 'Gasoyl7' x 'Vance'. The pedigree of Vance, co-released by Virginia Tech, USDA-ARS and North Carolina State University, is uncertain, but it was derived from the cross of 'Essex' to either an unknown wild soybean (*Glycine soja*, Sien. and Zucc.) or a small-seeded soybean plant introduction. The parents of N7101 were small seeded types Vance and 'Jizuka'. Jizuka (PI 561386) is a small seeded Japanese cultivar. Released 06/23/2008. 'N8101' soybean [*Glycine max* (L.,) Merr.] was cooperatively developed and released by the USDA-ARS and the North Carolina Agricultural Research Service in February, 2008 as a small-seeded Maturity Group VIII conventional cultivar. N8101 is the first publicly released small-seeded soybean cultivar in its maturity group and has potential use in the Japanese soyfoods market. N8101 is adapted to the southeastern USA between 30 and 36 degrees N Latitude. In 22 USDA regional trials, N8101 exhibited a 100-seed weight of 7.3 g, which was 5.4 g less than that of control variety 'Prichard RR'. Yield of N8101 was approximately 92% of that produced by Prichard RR (2712 kg ha⁻¹). Over seven additional trials in North Carolina, N8101 had a 100-seed weight of 6.5 g, which was 1.4 g less than that of small-seeded Maturity Group VII cultivar 'N7103'. Seed protein content was similar to that of Prichard RR. N8101 is resistant to shattering and to several important diseases, including soybean mosaic virus, frog-eye leaf spot and bacterial pustule. The reduced yield of N8101, compared to commodity-type cultivars, limits its use to specialty purposes. It is non-GMO, and, thus, may fit niche organic and other specialty markets.

The following were donated by J. Grover Shannon, University of Missouri-Columbia, Missouri Ag Experiment Station, Delta Research Center, Portageville, Missouri 63873, United States. Received 07/09/2008.

PI 654356. *Glycine max* (L.) Merr.

Breeding. Pureline. S99-2281; SY 808001. GP-361. Pedigree - S99-2281 originated from the cross of N90-516 x S92-1069 made in the field at Portageville, Missouri in 1995. N90-516 is from Hutcheson x N83-1014. N83-1014 is from Gasoy 17 x N77-940. N77-940 is from N70-1540 x Centennial. N70-1540 is from Darex D65-6765. D65-6765 is a selection from D58-3358 [Jackson(4) x D49-2491 (Lee sib)] x D59-9289 (selection from D51-4877 x D55-4168). S92-1069 is from Manokin x Hartwig. Soybean [*Glycine max* (L.) Merr.] germplasm line 'S99-2281' was developed at the University of Missouri-Delta Center and released by the University of Missouri Agricultural Experiment Station. It is an F4 plant selection composed in the F5 generation from the cross of N90-516 x S92-1069. S99-2281 is a productive, early group V (relative maturity 5.2) soybean line with broad resistance to soybean cyst nematode *Heterodera glycines* Ichinohe HG types (races), southern root knot nematode [*Meloidogyne incognita* (Kofoid & White) Chitwood] and reniform nematode [*Rotylenchulus reniformis* (Linford and Oliveira)]. It also carries the Rcs3 gene for resistance to Frogeye leaf spot caused by *Cercospora soja* K. Hara. In combined analyses over three years S99-2281 yielded 3% and 7% more than Manokin in southeast Missouri trials (15 tests) and in Uniform Group IVs Tests-Southern States (39 tests), respectively. S99-2281 plants are determinate in growth habit with white flowers, gray pubescence, and tan pods at maturity. Seeds are dull yellow with buff hila. In the combined analysis of the uniform tests over 28 environments and three years, seeds of S99-2281 have averaged 126 mg/seed in size with a seed quality score of 1.9 compared to 123 mg/seed and a seed quality score of 2.0 for Manokin. The average seed protein and oil contents of S99-2281 were 402 g/kg and 198 g/kg, respectively which were less than Manokin which averaged 406 g/kg and 205 g/kg. It will be useful as an elite parent in soybean breeding programs to develop productive soybean cultivars with broad resistance to frogeye leaf spot and resistance to multiple nematode species.

The following were developed by J. Mitchell McGrath, USDA, ARS, Department of Crop and Soil Science, Michigan State University, East Lansing, Michigan 48824-1325, United States. Received 07/09/2008.

PI 654357. *Beta vulgaris* L. subsp. *vulgaris*

Breeding. Population. EL54. Pedigree - EL54 is a sugarbeet germplasm derived from wild beet (*Beta vulgaris* ssp. *maritima*) accession WB879 (PI 540625) whose sugarbeet pedigree includes SP6822 (PI 615525) and C869 (PI 628754). The contribution of wild germplasm to EL54 is estimated at 12.5% after three backcrosses of WB879 to sugar beet SP6822. EL54 was developed at the Sugarbeet and Bean Research Unit in East Lansing, Michigan by J.M. McGrath. EL54 is released in the interest of broadening the genetic base of sugar beet. The parent accession WB879 was initially identified as resistant by C. Rush (Amarillo, TX) in the Sugarbeet Germplasm Committee's coordinated field trials in 1994 and reported as one of four accessions with very high resistance to *Aphanomyces* as judged by the lack of discoloration of hypocotyls. The introgression of this resistance into a sugar beet idotype adapted to the humid Eastern U.S. growing regions was the desired outcome. EL54 has shown excellent *Aphanomyces* resistance in field trials in Michigan, Minnesota, and North Dakota. EL54 is expected to be a source for development of parental lines for hybrid cultivars resistant to *Aphanomyces* seedling damping-off as well as to mature root rot caused by

Aphanomyces cochlioides Drechs. EL54 has shown a high degree of male sterility, and may be useful as an alternative source for deployment of cytoplasmic male sterility (CMS) for hybrid seed production. However, specific CMS maintainer lines have not yet been identified, nor has the cytoplasmic mitochondrial genome of WB879 been investigated. EL54 was increased in a 0.04 hectare plot in Oregon and harvested in four fractions (designated with a separate WC number); monogerm-male sterile (EL-A021485, WC050864), monogerm-male fertile (EL-A021484, WC050862), multigerm-male sterile (EL-A021481; WC050191), and multigerm-male fertile (EL-A021483, WC050860). This seed showed contamination (ca. 6%) with an unknown red chard-like pollinator.

The following were developed by Theodore C. Helms, North Dakota State University, Dept. of Plant Science, Rm 166 Loftsgard Hall, Fargo, North Dakota 58105-5051, United States. Received 06/19/2008.

PI 654358. *Glycine max* (L.) Merr.

Cultivar. Pureline. "CAVALIER". PVP 200800303; CV-499. Pedigree - Sargent*ND96-1006. Conventional type that is not glyphosate resistant. Is a 00.7 Maturity Group cultivar resistant to lodging and has resistance to Race 4 of phytophthora root rot (*Phytophthora sojae*). Has good yield and moderate resistance to iron-deficiency chlorosis. Has purple flower color, tawny pubescence, brown pod color, yellow hila, and dull seed coat.

The following were developed by Wayne Smith, Texas A&M University, Department of Soil & Crop Science, College Station, Texas 77843, United States. Received 07/01/2008.

PI 654359. *Gossypium hirsutum* L.

Breeding. Pureline. TAM A106-15 ELS. REST 654359; GP-894. Pedigree - TAM 94WE-37s//95BB-54s/TAM 94L-25. Has High Volume Instrument (HVI) UHM fiber length greater than 32.0 mm, which is the minimum UHM to be classified as upland extra long staple upland, and exceeded the minimum UHM length of 34.8 mm for pima (*G. barbadense*) in some comparisons. Fiber bundle strength is equal to or higher than Fibermax 832. Is later maturing than current upland cotton cultivars recommended for production in central and south Texas. Is morphologically similar, having pubescent leaves and stems, and excellent shatter resistance. Combines Extra Long Staple fiber length with excellent fiber bundle strength in an upland phenotype.

PI 654360. *Gossypium hirsutum* L.

Breeding. Pureline. TAM A106-16 ELS. REST 654360; GP-895. Pedigree - TAM 94WE-37s//95BB-54s/TAM 94L-25. Has High Volume Instrument (HVI) UHM fiber length greater than 32.0 mm, which is the minimum UHM to be classified as upland extra long staple upland, and exceeded the minimum UHM length of 34.8 mm for pima (*G. barbadense*) in some comparisons. Fiber bundle strength is equal to or higher than Fibermax 832. Later maturing than current upland cotton cultivars recommended for production in central and south Texas. Is morphologically similar, having pubescent leaves and stems, and excellent shatter resistance. Combines Extra Long Staple fiber length with excellent fiber bundle strength in an upland phenotype.

PI 654361. *Gossypium hirsutum* L.

Breeding. Pureline. TAM B147-21 ELS. REST 654361; GP-896. Pedigree - TAM 94L-25//PD6992/TAM 94L-25. Has High Volume Instrument (HVI) UHM fiber length greater than 32.0 mm, which is the minimum UHM to be classified as upland extra long staple upland, and exceeded the minimum UHM length of 34.8 mm for pima (*G. barbadense*) in some comparisons. Fiber bundle strength is equal to or higher than Fibermax 832. Later maturing than current upland cotton cultivars recommended for production in central and south Texas. Morphologically similar, having pubescent leaves and stems, and excellent shatter resistance. Combines Extra Long Staple fiber length with excellent fiber bundle strength in an upland phenotype.

PI 654362. *Gossypium hirsutum* L.

Breeding. Pureline. TAM B182-33 ELS. REST 654362; GP-897. Pedigree - TAM 94L-25/PSC 161. Has High Volume Instrument (HVI) UHM fiber length greater than 32.0 mm, which is the minimum UHM to be classified as upland extra long staple upland, and exceeded the minimum UHM length of 34.8 mm for pima (*G. barbadense*) in some comparisons. Fiber bundle strength is equal to or higher than Fibermax 832. Later maturing than current upland cotton cultivars recommended for production in central and south Texas. Is morphologically similar, having pubescent leaves and stems, and excellent shatter resistance. Combines Extra Long Staple fiber length with excellent fiber bundle strength in an upland phenotype.

PI 654363. *Gossypium hirsutum* L.

Breeding. Pureline. TAM C66-16 ELS. REST 654363; GP-898. Pedigree - TAM 94L-25//92Z-32-1/88F-28. Has High Volume Instrument (HVI) UHM fiber length greater than 32.0 mm, which is the minimum UHM to be classified as upland extra long staple upland, and exceeded the minimum UHM length of 32.8 mm for pima (*G. barbadense*) in some comparisons. Fiber bundle strength is equal to or higher than Fibermax 832. Later maturing than current upland cotton cultivars recommended for production in central and south Texas. Morphologically similar, having pubescent leaves and stems, and excellent shatter resistance. Combines Extra Long Staple fiber length with excellent fiber bundle strength in an upland phenotype.

PI 654364. *Gossypium hirsutum* L.

Breeding. Pureline. TAM C66-26 ELS. REST 654364; GP-899. Pedigree - TAM 94L-25//92Z-32-1/88F-28. Has High Volume Instrument (HVI) UHM fiber length greater than 32.0 mm, which is the minimum UHM to be classified as upland extra long staple upland, and exceeded the minimum UHM length of 34.8 mm for pima (*G. barbadense*) in some comparisons. Fiber bundle strength is equal to or higher than Fibermax 832. Later maturing than current upland cotton cultivars recommended for production in central and south Texas. Morphologically similar, having pubescent leaves and stems, and excellent shatter resistance. Combines Extra Long Staple fiber length with excellent fiber bundle strength in an upland phenotype.

PI 654365. *Gossypium hirsutum* L.

Breeding. Pureline. TAM C147-42 ELS. REST 654365; GP-900. Pedigree - TAM 94L-2//90M-8/89E-51. Has High Volume Instrument (HVI) UHM fiber length greater than 32.0 mm, which is the minimum UHM to be classified as upland extra long staple upland. Fiber bundle strength is equal to or higher than Fibermax 832. Later maturing than current upland cotton cultivars recommended for production in central and south Texas.

Morphologically similar, having pubescent leaves and stems, and excellent shatter resistance. Combines Extra Long Staple fiber length with excellent fiber bundle strength in an upland phenotype.

PI 654366. *Gossypium hirsutum* L.

Breeding. Pureline. TAM C155-22 ELS. REST 654366; GP-901. Pedigree - TAM 92L-2//90M-8/89E-51. Has High Volume Instrument (HVI) UHM fiber length greater than 32.0 mm, which is the minimum UHM to be classified as upland extra long staple upland, and exceeded the minimum UHM length of 32.8 mm for pima (*G. barbadense*) in some comparisons. Fiber bundle strength is equal to or higher than Fibermax 832. Later maturing than current upland cotton cultivars recommended for production in central and south Texas. Morphologically similar, having pubescent leaves and stems, and excellent shatter resistance. Combines Extra Long Staple fiber length with excellent fiber bundle strength in an upland phenotype.

The following were developed by G. Fedak, Agriculture and Agri-Food Canada, Plant Research Centre, Central Experimental Farm, Ottawa, Ontario K1A 0C6, Canada; Wenguang Cao, Agriculture & Agri-Foods Canada, Eastern Cereal & Oilseed Research Ctr., Central Experimental Farm, Ottawa, Ontario K1A 0C6, Canada. Received 06/23/2008.

PI 654367. *Triticum aestivum* L. subsp. *aestivum*

Breeding. TC 67. GP-856. Pedigree - Crocus * 2 / *T. timopheevii*. A segregating population of 1500 BC1F2 plants was derived from the cross and established and advanced to F7, using single seed descent (SSD). One hundred lines were selected from 535 BC1F7 lines, based on plant fertility and agronomic traits and evaluated for reaction to FHB for two seasons. Had high levels of resistance to FHB that was comparable to that of Sumai 3, the most FHB resistant wheat available, based on point inoculation. The resistance of TC 67 to FHB was further evaluated in replicated field trials, in comparison with two resistant wheat lines, Sumai 3 and HY 644, in a FHB disease nursery in 2003 and 2004. Results showed that TC 67 was significantly better than HY 644 in JHB incidence and severity and was comparable with Sumai 3 in deoxynivalenol (DON) content in the grain.

The following were developed by Florida Agricultural Experiment Station, Florida, United States. Received 07/09/2008.

PI 654368 PVPO. *Arachis hypogaea* L.

Cultivar. "FLORIDA FANCY". PVP 200800231.

PI 654369 PVPO. *Arachis hypogaea* L.

Cultivar. "McCloud". PVP 200800232.

The following were developed by Cotton Seed Int'l. Proprietary Limited, Leland, Mississippi, United States. Received 07/08/2008.

PI 654370 PVPO. *Gossypium hirsutum* L.

Cultivar. "FM 9180B2F". PVP 200800194.

PI 654371 PVPO. *Gossypium hirsutum* L.
Cultivar. "FM 9150F". PVP 200800193.

The following were developed by Seminis Vegetable Seeds, Inc., Woodland, California, United States. Received 06/04/2008.

PI 654372 PVPO. *Pisum sativum* L.
Cultivar. "CRESCENDO". PVP 200800273.

PI 654373 PVPO. *Pisum sativum* L.
Cultivar. "XP 08240773". PVP 200800274.

The following were developed by Syngenta Seeds, Inc., Nampa, Idaho, United States. Received 06/23/2008.

PI 654374 PVPO. *Lactuca sativa* L.
Cultivar. "MUSENA". PVP 200800281.

The following were developed by Harris Moran Seed Company, Modesto, California, United States. Received 06/24/2008.

PI 654375 PVPO. *Lactuca sativa* L.
Cultivar. "ROME 37". PVP 200600255.

The following were developed by Agriculture and Agri-Food Canada, Canada. Received 06/24/2008.

PI 654376 PVPO. *Linum usitatissimum* L.
Cultivar. "PRAIRIE BLUE". PVP 200800242.

The following were developed by Seminis Vegetable Seeds, Inc., United States. Received 06/24/2008.

PI 654377 PVPO. *Daucus carota* subsp. *sativus* (Hoffm.) Arcang.
Cultivar. "RF 71-4911A". PVP 200800282.

PI 654378 PVPO. *Daucus carota* subsp. *sativus* (Hoffm.) Arcang.
Cultivar. "RF 71-4912A". PVP 200800283.

PI 654379 PVPO. *Daucus carota* subsp. *sativus* (Hoffm.) Arcang.
Cultivar. "RIF 71-4966C". PVP 200800284.

PI 654380 PVPO. *Daucus carota* subsp. *sativus* (Hoffm.) Arcang.
Cultivar. "RN 71-4904C". PVP 200800285.

PI 654381 PVPO. *Daucus carota* subsp. *sativus* (Hoffm.) Arcang.
Cultivar. "RN 71-4963C". PVP 200800286.

The following were developed by NDSU Research Foundation, North Dakota, United States. Received 06/24/2008.

PI 654382 PVPO. Phaseolus vulgaris L.
Cultivar. "STAMPEDE". PVP 200800304.

PI 654383 PVPO. Phaseolus vulgaris L.
Cultivar. "LARIAT". PVP 200800305.

The following were developed by Cornell Center for Technology Enterprise & Commercialization, New York, United States. Received 06/24/2008.

PI 654384 PVPO. Triticum aestivum L. subsp. aestivum
Cultivar. "JENSEN". PVP 200800306.

The following were developed by Seeds, Inc., Washington, United States. Received 07/09/2008.

PI 654385 PVPO. Poa pratensis L.
Cultivar. "0AN-64"; RAD-0AN64. PVP 200800309.

The following were developed by Radix Research, Inc., Aumsville, Oregon, United States. Received 07/09/2008.

PI 654386 PVPO. Poa hybrid
Cultivar. "RAD-762". PVP 200800310.

The following were developed by Wisconsin Alumni Research Foundation, Illinois, United States. Received 06/24/2008.

PI 654387 PVPO. Solanum tuberosum L.
Cultivar. "MegaChip". PVP 200300067.

The following were donated by David Brenner, Iowa State University, Regional Plant Introduction Station, Room G212, Agronomy Building, Ames, Iowa 50011-1170, United States. Received 11/01/1989.

PI 654388. Amaranthus viridis L.
Wild. DB 8913; Ames 10828. Collected 09/18/1989 in Florida, United States. Latitude 26° 31' N. Longitude 82° 11' W. Elevation 2 m. Disturbed weedy area in front of the new post office, Munson Drive, Captiva Island, in Lee County. In flower at collection time, 80 cm tall. Stem with red coloring. The seed holding atriangles have a moist substance that does not dissipate during forced air drying. Sample size 1, pop. size 1, other plants could not be found.

The following were donated by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 01/08/1992.

PI 654389. Amaranthus albus L.
Ames 18499. Collected in Washington, United States. Latitude 46° 42' 1" N. Longitude 117° 9' 13" W. Elevation 730 m. From plants growing at the Washington State University, Spillman Agronomy Farm, 2.5

miles south to southeast from Pullman, WA. Address 1452 Johnson Rd.
Pullman, WA 99163.

The following were developed by David Brenner, Iowa State University,
Regional Plant Introduction Station, Room G212, Agronomy Building, Ames, Iowa
50011-1170, United States. Received 10/18/2007.

PI 654390. *Amaranthus caudatus* L.

Genetic. DB 2005652; Super Dwarf; Separation from PI 481007; Ames 29204.
Pedigree - Single plant selection from PI 481007 84ncai01. Naturally
occurring mutant dwarf. Grows as a rosette 3-4 cm tall. Blades are
triangular, 2 cm long and 2 cm wide. In the field, the inflorescence
was flat and resembles a pin cushion; in the greenhouse the
inflorescence was a short erect spike. White seeds.

The following were collected by Jaana Moilanen. Donated by Botanical Garden,
University of Joensuu, P.O. Box 111, Joensuu, Pohjois-Karjala SF 80101,
Finland. Received 09/08/1993.

PI 654391. *Angelica sylvestris* L.

031; Ames 21459. Collected 09/07/1992 in Pohjois-Karjala, Finland.
Latitude 62° 36' N. Longitude 29° 43' E. Spruce mire on the
shore, Honkaniemi, Joensuu, Pohjois-Karjala.

The following were collected by Krystyna Dabrowska, Ogród Botaniczny,
Uniwersytetu Marii Curie-Skłodowskiej, ul. Sławinkowska 3, Lublin, Lublin
20-810, Poland; Maria Fraszczak-Byc, Ogród Botaniczny, Uniwersytetu Marii
Curie-Skłodowskiej, ul. Sławinkowska 3, Lublin, Lublin 20-810, Poland;
Ryszard Sawicki, Ogród Botaniczny, Uniwersytetu Marii Curie-Skłodowskiej, ul.
Sławinkowska 3, Lublin, Lublin 20-810, Poland; Irena Stropek, Ogród
Botaniczny, Uniwersytetu Marii Curie-Skłodowskiej, ul. Sławinkowska 3,
Lublin, Lublin 20-810, Poland. Donated by Hortus Botanicus, Universitatis
Mariae Curie-Skłodowska, UL. Sławinkowska 3, Lublin, Lublin 20-818, Poland.
Received 05/03/1995.

PI 654392. *Angelica sylvestris* L.

Wild. Index Seminum 2435; Ames 22454. Collected in Poland. Latitude
50° 46' 30" N. Longitude 23° 57' 20" E. Czumow, Hrubieszow.

The following were collected by Krystyna Dabrowska, Ogród Botaniczny,
Uniwersytetu Marii Curie-Skłodowskiej, ul. Sławinkowska 3, Lublin, Lublin
20-810, Poland; Maria Fraszczak-Byc, Ogród Botaniczny, Uniwersytetu Marii
Curie-Skłodowskiej, ul. Sławinkowska 3, Lublin, Lublin 20-810, Poland;
Ryszard Sawicki, Ogród Botaniczny, Uniwersytetu Marii Curie-Skłodowskiej, ul.
Sławinkowska 3, Lublin, Lublin 20-810, Poland; Malgorzata Rozycka, Ogród
Botaniczny, Uniwersytetu Marii Curie-Skłodowskiej, ul. Sławinkowska 3,
Lublin, Lublin 20-810, Poland. Donated by Hortus Botanicus, Universitatis
Mariae Curie-Skłodowska, UL. Sławinkowska 3, Lublin, Lublin 20-818, Poland.
Received 08/03/1995.

PI 654393. *Angelica sylvestris* L.

Wild. Index Seminum #2864; Ames 22571. Collected 1993 in Krosno, Poland.

Latitude 49° 4' 1" N. Longitude 22° 40' 6" E. Near Wolosate in Bieszczady Mtn. Range.

The following were collected by K.G. Tkaczenko; V.M. Reinwald. Donated by V.L. Komarov Botanical Institute, Russian Academy of Sciences, 2, Prof. Popov Street, St. Petersburg, Leningrad 197376, Russian Federation. Received 01/16/1998.

PI 654394. *Angelica gmelinii* (DC.) Pimenov

Wild. 2735; Ames 24121. Collected 1996 in Primorye, Russian Federation.

Latitude 43° 10' N. Longitude 132° 48' E. Mountain Chualazaa, near station Anisimovka.

The following were collected by Jardin Botanique Universite Louis Pasteur, 28 Rue Goethe, Strasbourg, Bas-Rhin F-67083, France. Received 05/11/1998.

PI 654395. *Angelica sylvestris* L.

Wild. Index Seminum 8; Ames 24557. Collected 1998 in Bas-Rhin, France.

Latitude 48° 45' N. Longitude 7° 54' E. Near Rohrwiller.

The following were collected by Michael Lee, Minnesota Department of Natural Resources, Ecological Services, 500 Lafayette Road, St. Paul, Minnesota 55155, United States. Received 08/13/1999.

PI 654396. *Angelica atropurpurea* L.

Wild. Ames 25402. Collected 08/08/1999 in Minnesota, United States.

Latitude 43° 44' 15" N. Longitude 91° 56' 52" W. Along the Root River between Lanesboro and Whalan, NE 1/4 of SE 1/4 of Section 7, T103N, R9W, Fillmore County. Open bottomland forest, deep alluvial silt soil.

The following were collected by Joseph L. Suchecki, 2416 Kingsley Drive, Naperville, Illinois 60565, United States. Received 07/16/1999.

PI 654397. *Angelica atropurpurea* L.

Wild. Ames 25403. Collected 07/10/1999 in Illinois, United States.

Latitude 41° 44' 9" N. Longitude 88° 9' 58" W. Springbrook Prairie, Naperville, DuPage County.

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. Donated by James Adams, U.S. National Arboretum, USDA, ARS, 3501 New York Avenue, N.E., Washington, District of Columbia 20002, United States. Received 11/28/2001.

PI 654398. *Angelica anomala* Ave-Lall.

Wild. VV129; NA 71309; Ames 26451. Collected 09/09/2001 in Primorye, Russian Federation. Latitude 44° 32' 12" N. Longitude 131° 23' 54" E. Elevation 80 m. Razdol'naya (Suyfun) River, near the village of Fadeyevka, just west of Novogeorgiyevka, Oktyabrskaya District. Open area in *Salix-Ulmus* woods near the river. Herb; 2 meters tall; dry and brittle when collected.

PI 654399. *Angelica anomala* Ave-Lall.

Wild. VV211; NA 71351; Ames 26452. Collected 09/12/2001 in Primorye, Russian Federation. Latitude 43° 21' 24" N. Longitude 131° 37' 12" E. Elevation 50 m. Along Ponin Stream (tributary of the Gryaznaya River), near Gusyevka and Kravtsovka, Khasanskiy Region. Sunny sandbar along stream. Herb; 2 meters tall; dry and crisp when collected.

PI 654400. *Angelica czernaevia* (Fisch. & C. A. Mey.) Kitag.

Wild. VV163; NA 71325; Ames 26453. Collected 09/09/2001 in Primorye, Russian Federation. Latitude 44° 7' 54" N. Longitude 131° 38' 54" E. ~2 km north of the village of Vladimirovka, Oktyabrskaya District. Shallow gully at the edge of an oat field. Herb; 1.5 meters tall.

PI 654401. *Angelica dahurica* (Fisch.) Benth. & Hook. f. ex Franch. & Sav.

Wild. VV202; NA 71345; Ames 26454. Collected 09/11/2001 in Primorye, Russian Federation. Latitude 43° 40' 12" N. Longitude 132° 9' 30" E. Elevation 70 m. Along Pig (Kabani) Stream, ~4 km south of Gornotayezhdnaya Station, Ussurskiy District. Open meadow. Herb; 2 meters tall; dry and crisp when collected.

The following were collected by Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States; Jeff Carstens, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 09/16/2003.

PI 654402. *Angelica atropurpurea* L.

Wild. 2; Ames 27293. Collected 09/13/2003 in Iowa, United States. Latitude 43° 18' 49" N. Longitude 92° 52' 18" W. Elevation 331 m. 4 miles southeast of Mitchell, SE 1/4 of SE 1/4 of SE 1/4 of Section 8, T98N, R17W, Osage Quad, Mitchell County. Floodplain. Alluvial soil with some stoniness, well drained. Associated with *Fraxinus pennsylvanica*, *Acer saccharinum*, *Sambucus canadensis*, and *Rudbeckia laciniata*. 2.5 meters tall. Most seeds had fallen at time of collection.

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; H.H. Gecit, Ankara University, Ankara, Ankara, Turkey; D. Eser, Ankara University, Ankara, Ankara, Turkey. Donated by Calvin R. Sperling, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 402, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 10/24/1986.

PI 654403. *Panicum miliaceum* L. subsp. *miliaceum*

Cultivated. TU-85-074-03; 6843; Ames 7472. Collected 08/10/1985 in Bitlis, Turkey. Latitude 38° 25' N. Longitude 41° 55' E. Elevation 1320 m. 1.6 km northwest of Mutki on road to Kavak. Steep southern slope in area between semi-terraced fields of irrigated millet. *Amaranthus* and *Vicia* present as weeds. Thin soil over metamorphic rock. Region of oak and populus forest.

PI 654404. *Panicum miliaceum* L. subsp. *miliaceum*

Cultivated. TU-85-087-01; 6858; Koruk, Garis; Turkish Koruk; Ames 7473. Collected 08/13/1985 in Bitlis, Turkey. Latitude 38° 26' N. Longitude 42° 33' E. Elevation 1670 m. 30 km east of Kucukusu, near Ekinduzu village, on road from Tatvan to Van. Irrigated *Panicum* field, sown in June, maturing at time of collection. Used for chicken feed. Many years ago, before wheat was grown here, *Panicum* was also used for bread. *Setaria* (6859) covers about 5-10% of field. *Setaria* was once grown separately as a crop or mixed with *Panicum*.

The following were developed by USDA, NRCS, Rose Lake Plant Materials Center, 7472 Stoll Road, East Lansing, Michigan 48823-9420, United States. Received 06/18/2008.

PI 654405. *Desmodium glabellum* (Michx.) DC.

Uncertain. Alcona Germplasm; 9055415. Collected in Michigan, United States. Alcona County. Pedigree - Forty-nine collections of tick-trefoil (various species) were assembled from 8 states and 16 Major Land Resource Areas. Seeds from each collection were planted in the greenhouse for preliminary observation of growth characteristics in 1989. In 1990, plants from 40 of the collections were placed in propagation beds for a 2-year evaluation of survival, vigor, seed weight, plant height and width, bloom period, disease resistance, foliage production, and flower abundance. Five accession, including Alcona Germplasm, were selected for further evaluation based on early and late season ranking summaries. Advanced evaluations were completed in 1992 on the five remaining accessions. The Alcona collection and two other accessions were selected for increase due to their superior survival, emergence, vigor, and foliage abundance. Alcona Germplasm Dillenius' tick-trefoil is a member of the pea family. This native perennial forb grows from 2 1/2 to 5 feet in height. Its tiny flowers are pink or purple and irregular in shape. The flowers turn light blue when spent. Bloom time is from mid summer to early fall and lasts about a month. There is no floral scent. The leaves are alternate, composed of three entire leaflets. They are egg shaped with little or no point. There is little or no stipule where the leaf is attached to the stem. This tick-trefoil prefers partial sun and dry to slightly dry conditions. It usually grows in soil that contains loam, clay loam, or some kind of rocky material. Its habitats include savannas, rocky upland forest, edges of wooded areas, thickets and limestone glades.

PI 654406. *Desmodium paniculatum* (L.) DC.

Uncertain. Grant Germplasm; 9055428. Collected in Wisconsin, United States. Grant County. Pedigree - Forty-nine collections of tick-trefoil (various species) were assembled from 8 states and 16 Major Land Resource Areas. Seed from each collection were planted in the greenhouse for preliminary observation of growth characteristics in 1989. In 1990 plants from 40 of the collections were placed in propagation beds for a

2-year evaluation of survival, vigor, seed weight, plant height and width, bloom period, disease resistance, foliage production, and flower abundance. Five accessions, including Grant Germplasm, were selected for further evaluation based on early and late season ranking summaries. Advanced evaluations were completed in 1992 on the five remaining accessions. The Grant collection and two other accessions were selected for increase due to their superior survival, emergence, vigor, and foliage. Grant Germplasm Panicleleaf tick-trefoil is a multi-stemmed, native perennial legume that grows up to 47 inches tall. The thin branching stems of flower clusters rise above pointed, tripart leaves. The flowers bloom July thru August and are pink to purple pea flowers in doubly branched clusters atop stems. The fruit is a 3-6 segmented pod covered with hooked hairs. The pod breaks into single-seed segments at maturity. The common name of this species tells quite a bit about the plant. "Panicle" refers to the branched flower cluster. "Tick" refers to the segments of the fruit that break off and cling to clothing and "Trefoil" means "three leaves."

The following were developed by B. Badu-Apraku, International Institute of Tropical Agriculture, Ibadan, Oyo, 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. Received 07/18/2008.

PI 654407 QUAR. *Zea mays* L. subsp. *mays*

Breeding. Population. TZE-W Pop DT STR C4. GP-574. Pedigree - TZE-W Pop DT STR C4. Early maturing, white endosperm maize population with moderate levels of resistance to the parasitic weed, *Striga hermonthica*. Has good levels of tolerance to drought, resistance to maize streak virus (MSV), tropical lowland rust (incited by *Puccinia polysora*) and blight [caused by *Bipolaris maydis*]. Silks at 55 d and has plant height of 158 cm. Has a *Striga* emergence count of 142 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*. Produced grain yield of 3171 kg/ha under *Striga*-free conditions and 1842 kg/ha under artificial infestation with 5000 germinable seed of *S. hermonthica*. Has dent/flint grain texture.

PI 654408 QUAR. *Zea mays* L. subsp. *mays*

Breeding. Population. TZE-Y Pop DT STR C4. GP-575. Pedigree - TZE-Y Pop DT STR C4. Early maturing, yellow endosperm maize population with moderate levels of resistance to the parasitic weed, *Striga hermonthica*. Has good levels of tolerance to drought, resistance to maize streak virus (MSV) tropical lowland rust (incited by *Puccinia polysora*) and blight [caused by *Bipolaris maydis*]. Silks at 55 d and has plant height of 167 cm. Has a *Striga* emergence count of 94 plant 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*. Produced grain yield of 3025 kg/ha under *Striga*-free conditions and 1921 kg/ha under artificial infestation with 5000 germinable seed of *S. hermonthica*. Has dent/flint grain texture.

The following were developed by The Scotts Company, United States. Received 07/18/2008.

PI 654409 PVPO. *Lolium perenne* L.
Cultivar. "UNO". PVP 200800199.

The following were developed by Pure Seed Testing, Inc., United States.
Received 07/18/2008.

PI 654410 PVPO. *Lolium perenne* L.
Cultivar. "GRAND SLAM II". PVP 200800021.

PI 654411 PVPO. *Lolium perenne* L.
Cultivar. "GRAY FOX". PVP 200800022.

PI 654412 PVPO. *Lolium perenne* L.
Cultivar. "MANHATTAN 5 GLR". PVP 200800034.

The following were developed by Busch Agricultural Resources, Inc., Fort
Collins, Colorado, United States. Received 07/18/2008.

PI 654413 PVPO. *Hordeum vulgare* L.
Cultivar. "CELEBRATION"; 6B01-2218. PVP 200800311. Pedigree -
6B94-7378//B2027/M84.

The following were developed by Novel AG, Inc., Oregon, United States.
Received 07/18/2008.

PI 654414 PVPO. *Poa pratensis* L.
Cultivar. "ARROWHEAD"; NA-3261. PVP 200800313.

PI 654415 PVPO. *Poa pratensis* L.
Cultivar. "AVIATOR"; NA-3259. PVP 200800314.

PI 654416 PVPO. *Poa pratensis* L.
Cultivar. "CORSAIR"; NA-3249. PVP 200800315.

PI 654417 PVPO. *Poa pratensis* L.
Cultivar. "RUBICON"; NA-3248. PVP 200800316.

PI 654418 PVPO. *Poa pratensis* L.
Cultivar. "YANKEE"; NA-3271. PVP 200800317.

The following were developed by Syngenta Seeds, Inc., United States. Received
07/18/2008.

PI 654419 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "DOANS"; AP02T4342. PVP 200800318. Pedigree -
Coronado//PI572542/Karl 92/3/Jagger/2137. Hard red winter wheat.

PI 654420 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "COKER 9804"; D03*9804. PVP 200800319. Soft red
winter wheat.

The following were developed by Monsanto Technology LLC, United States.
Received 07/18/2008.

PI 654421 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "9700"; D02-8486. PVP 200800320. Pedigree - Nepal
133/91D-2085//2580/3/Savannah. Soft red winter wheat.

The following were developed by Syngenta Seeds, Inc., United States. Received
07/18/2008.

PI 654422 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "CULPEPPER"; BC960048-13. PVP 200800321. Pedigree -
Coronado/VBF0589-1. Soft red winter wheat.

PI 654423 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "AP503 CL2"; CLO 3040-5-2. PVP 200800322. Pedigree -
iW98-362A1(Als3-653)/AP502CL(Als1-653). Hard red winter wheat.

PI 654424 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "AP700 CL"; OSUPOP 28-13. PVP 200800323. Pedigree -
939515(Tubbs sib)/Stephens 3*/SF4. Soft white winter wheat.

PI 654425 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "SALUTE"; 98x1008-02. PVP 200800324. Pedigree -
Rod/Stephens 3*/SF4. Soft white winter wheat.

PI 654426 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "AP402 CL2"; CL03016. PVP 200800325. Pedigree -
iW98363W-A4/iW98363W-A10. Hard white winter wheat.

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 654427. *Cynodon dactylon* (L.) Pers.
Wild. UKR-99-247; Grif 14866. Collected 08/03/1999 in Krym, Ukraine.
Latitude 45° 23' 27" N. Longitude 36° 3' 25" E. Near
Novovidradne, north Crimean coast, Azov Sea. Mostly flat, seaside beach,
sandy.

The following were developed by C. S. Kauffman, Rodale Res. Ctr., Kutztown,
Pennsylvania, United States. Donated by Rodale Research Center, Rodale Press,
Box 323, RD 1, Kutztown, Pennsylvania 19530, United States. Received
03/19/1981.

PI 654428. *Amaranthus hypochondriacus* L.
Breeding. SP 107; 80S-SP107; Ames 2253. Collected in Nepal. Pedigree -
Selected from material collected in the Mustang district of Nepal and

provided by Dr. Lohani. Selected for Lygus resistance at the Rodale Research Center. Dwarf spike type plants, with white seeds, and red inflorescences, uniform.

PI 654429. *Amaranthus hypochondriacus* L.

Breeding. SP 113; 80S-SP113; Ames 2254. Collected in Nepal. Pedigree - Selected at the RRC from germplasm donated by Dr. Lohani, Nepal. Selected for dwarf plant type, and spike type inflorescence. It might have Lygus (insect) resistance. The seeds are white, the inflorescence is red, the plants are uniform.

PI 654430. *Amaranthus hypochondriacus* L.

Breeding. SP 124; 80S-SP124; Ames 2255. Collected in Nepal. Near Santu Marku. Pedigree - This is probably a selection from other germplasm. This has a rare non-shattering trait, the seed holding utricles burst irregularly, as observed in 2001, by David Brenner. The RRC notes mention that the seeds are black and white. Flowers are green. Leaves are green. The plants are mid-height and un-branched, unknown Lygus resistance.

The following were donated by Rodale Research Center, Rodale Press, Box 323, RD 1, Kutztown, Pennsylvania 19530, United States. Received 04/15/1986.

PI 654431. *Amaranthus cruentus* L.

Breeding. RRC 1040; Ames 5604. Collected 04/15/1986 in Taiwan. Pedigree - Separated from the 1978 summer seed lot of RRC 293 by plant breeders at the Rodale Research Center. The seeds are dark brown, flowers green, leaves green. The RRC class type is: African. It is early maturing. It is one of the shortest and earliest of the African grain type. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

The following were collected by K. Sherchen, Hill Crops Improvement Program, Dept. of Agriculture, Division of Agricultural Botany, Kathmandu, Nepal. Donated by Carolyn Reider, Rodale Research Center, Box 323, R.D. 1, Kutztown, Pennsylvania 19530, United States. Received 06/07/1990.

PI 654432. *Amaranthus caudatus* L.

GA-60; RRC 1351; IBPGR 3380; Ames 15170. Collected 12/01/1986 in Nepal. This may be useful for cross-pollination studies since the plants are green which is recessive in crosses with red plants (noticed by David Brenner in 2008). The seeds are white, flowers green, leaves light green. The RRC class type is: South American. In the greenhouse it had drooping flowers. In the field it was diseased and died before maturity. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA. Seed shipped with closing of Rodale Amaranthus program.

PI 654433. *Amaranthus caudatus* L.

GA-65; IBPGR 3450; RRC 1356; Ames 15171. Collected 12/01/1986 in Nepal. The seeds are white, flowers greenish-yellow, leaves light green. The RRC class type is: South American. In the greenhouse it had drooping flowers. In the field it was diseased and died before maturity. Observations from the Rodale Research Center, 1988 Rodale Amaranth

Germplasm Catalog. Emmaus, PA. Seed shipped with closing of Rodale Amaranthus program.

PI 654434. *Amaranthus caudatus* L.

GA-67; IBPGR 4100; RRC 1358; Ames 15172. Collected 12/01/1986 in Nepal. The seeds are tan, flowers green, leaves light green. The RRC class type is: South American. In the greenhouse it had drooping flowers. In the field it was diseased and died before maturity. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA. Seed shipped with closing of Rodale Amaranthus program.

PI 654435. *Amaranthus caudatus* L.

GA-112; IBPGR I-56; RRC 1369; Ames 15173. Collected 12/01/1986 in Nepal. The seeds are tan, flowers green, leaves light green. The RRC class type is: South American. In the greenhouse it had drooping flowers. In the field it was diseased and died before maturity. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA. Seed shipped with closing of Rodale Amaranthus program.

The following were developed by Aaron Hager, University of Illinois, Dept. of Crop Sciences, AW-101 Turner Hall, Urbana, Illinois 61801, United States; Federico Trucco, University of Illinois, 1201 West Gregory Drive, Room 360, Urbana, Illinois 61801, United States; Patrick J. Tranel, University of Illinois - Urbana-Champaign, Crop Sciences Department, 320 ERML, MC 051, Urbana, Illinois 61801, United States. Donated by Patrick J. Tranel, University of Illinois - Urbana-Champaign, Crop Sciences Department, 320 ERML, MC 051, Urbana, Illinois 61801, United States. Received 04/01/2008.

PI 654436. *Amaranthus hybridus* L.

Genetic. 21605-16; Ames 29388. Pedigree - Derived from *A. hybridus* seed collected from a soybean field in Edgar County, Illinois. The original population was evaluated for ALS-inhibitor resistance at the seedling stage with an imazethapyr (BASF Corporation) application of 900 g/ha (>10 ti the normal field rate). Resistant individuals were selfed to obtain several S1 populations. A subset of the progeny from each S1 population were screened for herbicide resistance (as indicated above), and a uniformly resistant population (S1) was selected for this study. The control *A. hybridus* population used was obtained from selfing herbicide-susceptible parents grown from seed collected in an Illinois field. Exhibits an alanine by threonine amino acid substitution at position 122 of Acetolactate synthase (ALS) as the basis for imidazolinone-specific resistance in an *A. hybridus* population from Illinois. In vitro inhibition of enzymatic activity (I50) required 1000-fold greater concentration of imazethapyr in the resistant population compared with a susceptible control. This mutation represents the second ALS alteration associated with herbicide resistance in a natural *A. hybridus* population. Originally collected from a soybean field in Edgar County, Illinois.

The following were developed by Aaron Hager, University of Illinois, Dept. of Crop Sciences, AW-101 Turner Hall, Urbana, Illinois 61801, United States; Patrick J. Tranel, University of Illinois - Urbana-Champaign, Crop Sciences Department, 320 ERML, MC 051, Urbana, Illinois 61801, United States; William L. Patzoldt, University of Illinois - Urbana-Champaign, Crop Sciences Department, 1201 West Gregory Drive, Urbana, Illinois 61801, United States.

Donated by Patrick J. Tranel, University of Illinois - Urbana-Champaign, Crop Sciences Department, 320 ERML, MC 051, Urbana, Illinois 61801, United States. Received 04/01/2008.

PI 654437. *Amaranthus tuberculatus* (Moq.) J. D. Sauer

Genetic. ACR; Ames 29389. Pedigree - Derived from the original field population via recurrent selection for all three herbicide resistances (resistance to atrazine, Protox inhibitors, and ALS inhibitors). The donor is not positive that all three resistances are fixed, so they can be non-uniform in a planting. A population of waterhemp was identified in Adams County, Illinois, that survived treatment of several acetolactate synthase (ALS) inhibitors and a postemergence (POST) application of lactofen, a protoporphyrinogen oxidase (PPO)-inhibiting herbicide. Greenhouse studies were conducted to quantify the responses of this waterhemp population, designated ACR, to multiple PPO inhibitors and various other herbicides with different sites of action. Resistance ratios were obtained by comparing herbicide dose-response curves between the ACR population and a herbicide-susceptible waterhemp population. The ACR population was resistant to lactofen (23-fold) and to five other PPO-inhibiting herbicides (ranging from 2.2- to 6.2-fold). Furthermore, the ACR waterhemp population was 17,000-fold and 18,000-fold resistant to imazamox and thifensulfuron, respectively, two ALS-inhibiting herbicides. In response to atrazine, a Photosystem II inhibitor, the ACR population was 38-fold resistant. Plants within the ACR waterhemp population survived treatment of a herbicide mixture containing lactofen at 175 g ai ha⁻¹, imazamox at 44 g ae ha⁻¹, and atrazine at 1,000 g ai ha⁻¹. Thus, individual plants, not just the population as a whole, displayed multiple herbicide resistance. The ACR population is not resistant to glyphosate or paraquat. This is the first reported weed population from the United States with resistances to herbicides inhibiting three unique sites of action.

The following were collected by Krystyna Dabrowska, Ogród Botaniczny, Uniwersytetu Marii Curie-Skłodowskiej, ul. Sławinkowska 3, Lublin, Lublin 20-810, Poland; Maria Franszczak-Byc, Ogród Botaniczny, Uniwersytetu Marii Curie-Skłodowskiej, ul. Sławinkowska 3, Lublin, Lublin 20-810, Poland; Ryszard Sawicki, Ogród Botaniczny, Uniwersytetu Marii Curie-Skłodowskiej, ul. Sławinkowska 3, Lublin, Lublin 20-810, Poland; Małgorzata Rozycka, Ogród Botaniczny, Uniwersytetu Marii Curie-Skłodowskiej, ul. Sławinkowska 3, Lublin, Lublin 20-810, Poland. Donated by Hortus Botanicus, Universitatis Mariae Curie-Skłodowska, UL. Sławinkowska 3, Lublin, Lublin 20-818, Poland. Received 08/03/1995.

PI 654438. *Eryngium planum* L.

Wild. Index Seminum #3009; Ames 22578. Collected 1993 in Chelm, Poland. Latitude 51° 8' 35" N. Longitude 23° 28' 16" E. Zmudz, Chelm.

PI 654439. *Eryngium planum* L.

Wild. Index Seminum #3011; Ames 22580. Collected 1993 in Lublin, Poland. Latitude 51° 14' 47" N. Longitude 22° 34' 6" E. Sobianowice, Lublin.

The following were collected by Instytut Hodowli i Aklimatyzacji Roslin, Ogród Botaniczny, Ul. Jezdziecka 5, Bydgoszcz, Bydgoszcz 85-687, Poland. Received 05/17/1996.

PI 654440. *Eryngium planum* L.

Wild. Index Seminum 151; Ames 23006. Collected 1993 in Lomza, Poland.
Latitude 53° 10' 41" N. Longitude 22° 3' 33" E.

The following were collected by Krystyna Dabrowska, Ogród Botaniczny, Uniwersytetu Marii Curie-Skłodowskiej, ul. Sławinkowska 3, Lublin, Lublin 20-810, Poland; Maria Franszczak-Byc, Ogród Botaniczny, Uniwersytetu Marii Curie-Skłodowskiej, ul. Sławinkowska 3, Lublin, Lublin 20-810, Poland; Ryszard Sawicki, Ogród Botaniczny, Uniwersytetu Marii Curie-Skłodowskiej, ul. Sławinkowska 3, Lublin, Lublin 20-810, Poland; Malgorzata Rozycka, Ogród Botaniczny, Uniwersytetu Marii Curie-Skłodowskiej, ul. Sławinkowska 3, Lublin, Lublin 20-810, Poland. Donated by Ogród Botaniczny, Uniwersytet Marii-Curie Skłodowskiej, ul. Sławinkowska 3, Lublin, Lublin 20-810, Poland. Received 06/12/1996.

PI 654441. *Eryngium planum* L.

Wild. 2261; Ames 23037. Collected in Zamosc, Poland. Latitude 50° 44' 49" N. Longitude 23° 13' 28" E. At Czumow near Hrubieszow.

The following were donated by Botanical Garden, Institute of Ecology and Botany, of the Hungarian Academy of Sciences, Vacratot, Pest H-2163, Hungary. Received 06/17/1996.

PI 654442. *Eryngium planum* L.

Cultivated. 1689; Ames 23063.

The following were donated by Pakistan Forest Institute, Peshawar, North-West Frontier, Pakistan; USDA, ARS-Midwest Area, National Center for Agricultural Utilization Research, 1815 North University Street, Peoria, Illinois 61604, United States. Received 01/29/1998.

PI 654443. *Eryngium caeruleum* M. Bieb.

Uncertain. NU 60588; Ames 24325.

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 654444. *Eryngium tenue* Lam.

Wild. Index Seminum 163; Ames 25386. Collected 09/08/1998 in Viseu, Portugal. Latitude 40° 58' N. Longitude 7° 35' 30" W. Between Rua and Moimenta da Beira.

The following were collected by Greg Houseal, University of Northern Iowa, Iowa Ecotype Project, Native Roadside Vegetation Center, Cedar Falls, Iowa 50614-0294, United States. Received 01/15/2003.

PI 654445. *Eryngium yuccifolium* Michx.

Wild. EY2-60; Ames 26967. Collected 09/19/1998 in Iowa, United States. Latitude 42° 31' 5" N. Longitude 94° 37' 8" W. Sherman School, SE 1/4 of Section 15, T89N, R32W, Calhoun County.

PI 654446. *Eryngium yuccifolium* Michx.

Wild. EY3-65; Ames 26968. Collected 10/05/2001 in Iowa, United States. Latitude 41° 3' N. Longitude 94° 6' 4" W. Mt. Pisgah State Preserve, center of Section 8, T72N, R28W, Union County.

The following were donated by Pablo Morales-Payan, University of Florida, Horticultural Science, P.O. Box 110690, Gainesville, Florida 32611-0690, United States. Received 05/01/2003.

PI 654447. *Eryngium foetidum* L.

Uncertain. Ames 27073. Donor obtained seed from a friend in Broward County, Florida. The friend obtained seed from Miami, Dade County, Florida. Believed to originate from the Dominican Republic years ago.

The following were collected by R. Aguerre, Universidad de Sonora, Santa Ana, Sonora, Mexico. Donated by Suzanne Nelson, Native Seeds/Search, 526 N., 4th Avenue, Tucson, Arizona 85705, United States. Received 06/27/2006.

PI 654448. *Panicum hirticaule* J. Presl

Cultivated. MFM 923; O01-002; CF03; Ames 28194. Collected 1976 in Sonora, Mexico. Latitude 27° 0' N. Longitude 109° 0' W. Elevation 500 m. Bojajaqui, Municipio de Alamos. Farm storage/market. Pale and large seeded variety. Used as food and forage. Rare.

The following were developed by University of Idaho, Aberdeen, Idaho, United States. Received 07/29/2008.

PI 654449 PVPO. *Solanum tuberosum* L.

Cultivar. "IVORY CRISP". PVP 200200157.

The following were developed by The Scotts Company, United States. Received 08/11/2008.

PI 654450 PVPO. *Poa pratensis* L.

Cultivar. "HAMPTON". PVP 200800328.

PI 654451 PVPO. *Poa pratensis* L.

Cultivar. "JULIET". PVP 200800329.

PI 654452 PVPO. *Poa pratensis* L.

Cultivar. "GAELIC". PVP 200800330.

The following were developed by Pure Seed Testing, Inc., United States. Received 08/11/2008.

PI 654453 PVPO. *Lolium perenne* L.

Cultivar. "SHINING STAR II". PVP 200800332.

The following were developed by Virginia Tech Intellectual Properties, Inc., Virginia, United States. Received 08/11/2008.

PI 654454 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "USG 3555"; VA02W-555. PVP 200800356. Pedigree -
VA94-52-60/Pio2643//USG3209.

The following were developed by The Regents of the University of California, California, United States. Received 08/11/2008.

PI 654455 PVPO. *Avena sativa* L.
Cultivar. Pureline. "UC 113". PVP 200800357. Pedigree -
77-22/77-23//75Q036-22.

PI 654456 PVPO. *Avena sativa* L.
Cultivar. Pureline. "UC 125". PVP 200800358. Pedigree - Coker 234/Coker
227//75Q036-83-1D.

PI 654457 PVPO. *Avena sativa* L.
Cultivar. Pureline. "UC 148". PVP 200800359. Pedigree - BYDV
Resistant/Swan.

PI 654458 PVPO. *Avena sativa* L.
Cultivar. Pureline. "UC 130". PVP 200800360. Pedigree - BYDV
Resistant/Swan.

PI 654459 PVPO. *Avena sativa* L.
Cultivar. Pureline. "UC 128". PVP 200800361. Pedigree - Albion
20//5068/6975/3/Montezuma.

PI 654460 PVPO. *Avena sativa* L.
Cultivar. Pureline. "UC 132". PVP 200800362. Pedigree - Palestine
Dwarf/OT 207.

The following were developed by Cascade International Seed Co., Oregon, United States. Received 08/11/2008.

PI 654461 PVPO. *Dactylis glomerata* L.
Cultivar. "HARVESTAR". PVP 200800364.

The following were developed by Louisiana State University Agricultural Center, Louisiana, United States. Received 08/11/2008.

PI 654462 PVPO. *Oryza sativa* L.
Cultivar. "CATAHOULA". PVP 200800365.

PI 654463 PVPO. *Oryza sativa* L.
Cultivar. "CL151". PVP 200800366.

The following were developed by Monsanto Holland B.V., Netherlands. Donated by Seminis Vegetable Seeds, Inc., Woodland, California, United States. Received 08/05/2008.

PI 654464 PVPO. *Capsicum annuum* L.
Cultivar. "SBY281219". PVP 200800333.

The following were developed by Seminis Vegetable Seeds, Inc., Woodland, California, United States. Received 07/21/2008.

PI 654465 PVPO. *Citrullus lanatus* (Thunb.) Matsum. & Nakai
Cultivar. "TCS 110-1005". PVP 200800312.

The following were developed by Honda Motor Co. Ltd., Tokyo, Japan. Received 08/01/2008.

PI 654466 PVPO. *Oryza sativa* L.
Cultivar. "KOSHIHIKARI KAZUSA 2 go". PVP 200800226.

PI 654467 PVPO. *Oryza sativa* L.
Cultivar. "KOSHIHIKARI H 4 GOU". PVP 200800227.

PI 654468 PVPO. *Oryza sativa* L.
Cultivar. "KOSHIHIKARI KAZUSA 3 go". PVP 200800228.

The following were donated by Joerg Renuus, Europlant Pflanzensucht GmbH, PF 1380, Luneburg, Germany. Received 01/17/2003.

PI 654469 PVPO. *Solanum tuberosum* L.
"Laura"; Q 43893. PVP 200300064.

PI 654470 PVPO. *Solanum tuberosum* L.
"Milva"; Q 43894. PVP 200300065.

The following were collected by David Skinner, National Resources Conservation Service, Washington State University, Plant Materials Farm, Pullman, Washington, United States. Developed by USDA, NRCS, Pullman Plant Materials Center, P.O. Box 646211, Pullman, Washington 99164-6211, United States. Donated by Mark E. Stannard, National Resources Conservation Service, Washington State University, 211 Hulbert Hall, Pullman, Washington 99164-6211, United States. Received 08/21/2008.

PI 654471. *Elymus glaucus* Buckley
Cultivated. Union Flat; 9080250; W6 33384. Collected 07/21/1997 in Washington, United States. Elevation 548 m. Collected on an east facing 20-60% slope above Union Flat Creek. The collection was made in section 33, T14N, R44E in southwestern Whitman County, WA. The collection site is 1800 feet elevation and underlain by a Gwin-Linville-Tucannon silt loam soil.

The following were developed by Pioneer Hi-Bred International, Inc., Johnston, Iowa 50131, United States. Received 08/19/2008.

PI 654472 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHCD4". PVP 200800334.

PI 654473 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHETG". PVP 200800335.

PI 654474 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHF5H". PVP 200800336.

PI 654475 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHGJ4". PVP 200800337.

PI 654476 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHGMA". PVP 200800338.

PI 654477 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHH58". PVP 200800339.

PI 654478 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHHTK". PVP 200800340.

PI 654479 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHMWF". PVP 200800341.

PI 654480 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHNVW". PVP 200800342.

PI 654481 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHNWJ". PVP 200800343.

PI 654482 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHNWK". PVP 200800344.

PI 654483 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHPGH". PVP 200800345.

PI 654484 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHPH7". PVP 200800346.

PI 654485 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHR1R". PVP 200800347.

PI 654486 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHRAN". PVP 200800348.

PI 654487 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHRDW". PVP 200800349.

PI 654488 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHV5W". PVP 200800350.

PI 654489 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHWHE". PVP 200800351.

PI 654490 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHWMJ". PVP 200800352.

PI 654491 PVPO. Zea mays L. subsp. mays
Cultivar. "PHWPD". PVP 200800353.

PI 654492 PVPO. Zea mays L. subsp. mays
Cultivar. "PHWRW". PVP 200800354.

PI 654493 PVPO. Zea mays L. subsp. mays
Cultivar. "PHWTN". PVP 200800355.

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 654494. Vigna unguiculata (L.) Walp. subsp. unguiculata
TVu 13859; G-108; Grif 12211.

The following were donated by USDA, ARS, U.S. Sugarcane Field Station, Meridian, Mississippi, United States. Received 1983.

PI 654495. Sorghum bicolor (L.) Moench subsp. bicolor
IS 620; MN 291; SA 340; 65I 2511; Grif 14968; EXTRA EARLY SUMAC.

PI 654496. Sorghum bicolor (L.) Moench subsp. bicolor
IS 313; MN 343; CIso 792; Grif 14973; THICK RIND KAOLIANG.

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; Pedro Juan Caballero, Ministry of Agriculture and Livestock, Instituto Agronomico Nacional, Caacupe, Paraguay; Luis Enrique Robledo, Direccion de Investigacion Agricola, Ministerio de Agricultura y Ganaderia, Km 10,5 Ruta 1, San Lorenzo, Central, Paraguay. Received 05/10/2007.

PI 654497. Arachis glabrata Benth.
Wild. SWmCbRb 3946; NGRL 871. Collected 04/28/2007 in Concepcion, Paraguay. Latitude 22° 22' 33" S. Longitude 56° 55' 17" W. Elevation 205 m. Puentesino, 500 m east of gas station. Along roadside in cleared forest. Plants prostrate, leaflets to 3 cm long by 1 cm wide, glabrous. Internodes short. Plants rhizomatous. Orange flowers, calyx tube to 5 cm. Light purple hypanthium.

PI 654498. Arachis glabrata Benth.
Wild. SWmCbRb 3951; NGRL 874. Collected 04/29/2007 in Amambay, Paraguay. Latitude 22° 7' 1" S. Longitude 56° 30' 8" W. Elevation 211 m. Edge of Bela Vista, 2 km S of bridge at border with Brazil. Soil reddish brown sand. Along unpaved road at edge of town. Plants low-growing, rhizomatous. No mainstems observed. Leaves small, leaflets 4, to 3 cm long by 1.3 cm wide. Flowers orange, calyx tube to 5 cm.

PI 654499. Arachis major Krapov. & W. C. Greg.
Wild. SWmCbRb 3953; NGRL 876. Collected 04/29/2007 in Amambay, Paraguay. Latitude 22° 41' 58" S. Longitude 56° 14' 45" W. Elevation 255 m. 3.5 km W of crossroads of Highway 3 and Highway 5. Area cleared for

pasture. Brown gravelly sand. Along road in deep grass. Plants very small. Taproot strong. All plants heavily grazed and regrowing. Of six plants sampled, only one had more than one expanded leaf. Leaflets 3 mm by 0.7 mm. Seeds plentiful, mature, to 15 mm long by 7 mm wide with beak.

PI 654500. *Arachis microsperma* Krapov. et al.

Wild. SWmCbRb 3941; NGRL 866. Collected 04/27/2007 in Concepcion, Paraguay. Latitude 22° 10' 58" S. Longitude 56° 31' 11" W. Elevation 181 m. 8.5 km from bridge at Bela Vista on road to San Carlos, 0.5 km beyond first small stream. Slightly rolling hills. Deforested. Scattered palms and other small trees. *Capsicum baccatum* observed. Red sandy loam soil. Along side of unpaved road. Plants decumbent, mainstem not observed. Lateral branches to 40 cm. Leaflets 4, small, up to 3 cm long, long bristles on margin, hairs adpressed on lower surface, upper surface glabrous, stipules with bristles. Taproots strong on older plants. Hypanthium hairy. Calyx with bristles (numerous). Only orange flowers observed. Fruits large for the species, up to 9 mm. Outer epidermis of seed sloughed off. Seed observed with reticulated outer epidermis.

PI 654501. *Arachis nitida* Valls et al.

Wild. SWmCbRb 3942; NGRL 867. Collected 04/27/2007 in Concepcion, Paraguay. Latitude 22° 19' 17" S. Longitude 56° 31' 50" W. Elevation 202 m. Approximately 26 km SW of bridge at Bela Vista, on road to San Carlos. Deforested. A few scattered trees. Red gravelly soil. Along unpaved road. *A. glabrata* and *A. microsperma* also present. Plants prostrate, leaflets 4, up to 10 mm long, rounded, shiny, thickened, slightly recurved. Rhizomes. Flowers yellow.

PI 654502. *Arachis paraguariensis* Chodat & Hassl.

Wild. SWmCbRb 3948; NGRL 8873; NGRL 873. Collected 04/28/2007 in Concepcion, Paraguay. Latitude 22° 23' 8" S. Longitude 56° 52' 40" W. Elevation 209 m. Four km E of Puentesino, on the road to Bela Vista, 68 km SW of bridge at the border at Bela Vista. Reddish brown fine sand. Deforested, converted to improved pasture. Along side of unpaved road. Plants erect, laterals up to 0.75 m. Mainstem not observed (perhaps eaten). Stems angular, coarse, internodes to 5 cm. Leaflets 4, large, narrow, up to 8 cm long and 1 cm wide, thickened. Stipules long, both adnate and free portions. Flowers orange, calyx tube to 7 cm. Fruits rounded, up to 13 mm long and 8 mm wide. Pegs long. Taproot long, fleshy.

PI 654503. *Arachis paraguariensis* Chodat & Hassl.

Wild. SWmCbRb 3954; NGRL 877. Collected 04/30/2007 in Concepcion, Paraguay. Latitude 22° 48' 38" S. Longitude 56° 24' 26" W. Elevation 209 m. Nu Pora. Four km W from Rt. 5. Along unpaved road next to cleared pastures. A few scattered trees. One plant under trees away from road. Mainstem not observed. Lateral branches to 0.5 m. Leaflets long and narrow, to 5 cm by 1 cm. Leaves only at terminals of lateral branches. Internodes to 7 cm, stipules long and narrow. Taproot with enlarged lteral branches. No flowers. Fruits to 12 mm by 6 mm (mature).

PI 654504. *Arachis pflugeae* C. E. Simpson et al.

Wild. SWmCbRb 3940; NGRL 865. Collected 04/26/2007 in Concepcion, Paraguay. Latitude 22° 19' 32" S. Longitude 56° 58' 8" W. Elevation 200 m. 83 km SW of bridge at Bela Vista, 11 km NW of

Puentesino on the road to San Carlos. Cleared forest with scattered palms and other small trees. Low flat area with rolling hills surrounding. Red coarse sandy soil. Along side of unpaved road. Plants small. No mainstem present. Lateral branches, to 45 cm. Leaflets 4, dark green, 1 to 4 cm long, very narrow, up to 1 cm wide, hairs and bristles on margins, short hairs on bottom. No flowers observed. Spider mites on some plants, which were pale green. No leaf spot observed. Soil sifted for seeds.

PI 654505. *Arachis pflugeae* C. E. Simpson et al.

Wild. SWmCbRb 3944; NGRL 869. Collected 04/27/2007 in Concepcion, Paraguay. Latitude 22° 25' 24" S. Longitude 56° 44' 58" W. Elevation 178 m. 54 km SW from bridge at Bela Vista on road to San Carlos. Improved pasture. Plants growing among thick grass. Originally forest. Moderate size plants, mainstem not observed, lateral branches up to 45 cm, profuse branching at crown of plant. Leaflets 4, dark green, up to 4 cm long, up to 5 mm wide. Leaflets only present at terminals of lateral branches, other leaflets fallen. Tap root strong. Flowers orange. Fruits to 9 mm, no reticulation, but outer pericarp mostly missing.

PI 654506. *Arachis pflugeae* C. E. Simpson et al.

Wild. SWmCbRb 3945; NGRL 870. Collected 04/28/2007 in Concepcion, Paraguay. Latitude 22° 20' 50" S. Longitude 56° 57' 21" W. Elevation 197 m. 80 km SW of bridge at Bela Vista. At crossroads next to Escuela Basica No. 4662 "Arroyo Ita". Partially deforested cerrado outcrop in an area of denser forest. Near road. Long grass. No evidence of grazing. Mainstem not observed. Lateral branches to 50 cm. 4 leaflets narrow, to 35 mm long by 10 mm wide. Rachis variable, from 1 to 8 mm long. Leaflets fallen except from last 1 to 5 nodes. Flowers orange, hypanthium reddish, to 8 cm. Pegs not observed. Fruits to 8 mm long by 6 mm wide. Moderate reticulation on external pericarp.

PI 654507. *Arachis pflugeae* C. E. Simpson et al.

Wild. SWmCbRb 3947; NGRL 872. Collected 04/28/2007 in Concepcion, Paraguay. Latitude 22° 23' 14" S. Longitude 56° 53' 16" W. Elevation 201 m. Three km E of Puentesino, 70 km SW from bridge at Bela Vista. Pastureland. Fine brown sand. Slightly rolling hills. Few scattered trees (palms mostly). Along unpaved road. No mainstem observed. Lateral branches up to 50 cm long, leaflets 4, to 35 mm long and 10 mm wide. Rachis variable, from 1 to 8 mm long. Leaflets fallen except from last nodes. Flowers orange, hypanthium reddish to 8 cm.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 08/11/2003.

PI 654508. *Trifolium campestre* Schreb.

Uncertain. TKM02-009; Grif 15254. Collected 05/28/2002 in Turkmenistan. Latitude 38° 25' 46" N. Longitude 56° 24' 31" E. Elevation 394 m. Site No. 2.

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. Received 09/02/2008.

PI 654509. *Gossypium hirsutum* L.

Breeding. Pureline. Arkot 9704; Ark 9704-13-08. REST654509. Pedigree - Arkot 9108/M331RKN. Morphological traits of Arkot 9704 are similar to SG105 (check cultivar), except Arkot 9704 is taller, has a more glabrous leaf and lower bract trichome density. Over 14 replicated field tests in Arkansas, lint yields of Arkot were comparable to yields of SG 105 and PSC 355 with slightly better adaptation to more southern locations. Yields of Arkot 9704 were produced with fewer seed per area and higher weight of fibers per seed (lint index) than the check cultivars. Compared to SG 105, Arkot 9704 produced higher open boll percentage, lint percentage, seed index, and fibers per seed; similar micronaire and lower fiber length, length uniformity index, and fiber strength. Arkot 9704 is resistance to all U.S. races of *Xanthomonas campestris* pv. *malvacearum* (Smith) Dye, the causal agent of bacterial blight. Resistance to *Verticillium* wilt (caused by *Verticillium dahliae*, Kleb) is equal to SG 105 and PSC 355. Resistance of Arkot 9704 to root-knot nematode {*Meloidogyne incognita* [(Kofoid & White, 1919) Chitwood, 1949]} is equal to SG 105, but less resistant than PSC 355. Arkot 9704 is more resistant to tarnished plant bug [*Lygus lineolaris* (Palisot de Beauvois)] than SG 105, but less resistant than PSC 355.

PI 654510. *Gossypium hirsutum* L.

Breeding. Pureline. Arkot 9706. REST 654510. Pedigree - Arkot 9108/Arkot 8712. Morphological traits of Arkot 9706 are similar to SG105 (check cultivar), except Arkot 9706 tends to have a taller final plant height. Over 14 replicated field tests in Arkansas, lint yields of Arkot were comparable to yields of SG 105 and PSC 355 with better adaptation to more southern locations. Yields of Arkot 9706 were produced with fewer seed per area and higher weight of fibers per seed than the check cultivars. Compared to SG 105, Arkot 9706 produced higher, lint percentage, seed index and fibers per seed; similar open boll percentage, micronaire and length uniformity index; and lower fiber length and fiber strength. Arkot 9706 is resistance to all U.S. races of *Xanthomonas campestris* pv. *malvacearum* (Smith) Dye, the causal agent of bacterial blight. Resistance to *Verticillium* wilt (caused by *Verticillium dahliae*, Kleb) is equal to SG 105 and PSC 355. Resistance of Arkot 9706 to root-knot nematode {*Meloidogyne incognita* [(Kofoid & White, 1919) Chitwood, 1949]} is equal to SG 105, but less resistant than PSC 355. Arkot 9706 is more resistant to tarnished plant bug [*Lygus lineolaris* (Palisot de Beauvois)] than SG 105 or PSC 355.

PI 654511. *Gossypium hirsutum* L.

Breeding. Pureline. Arkot 9721; Ark 9721-23-08. REST 654511. Pedigree - Arkot 8712 (PI 626101)/Ark 8708-31-06. Ark 8708-31-06 is a breeding line derived from the double cross: F1 (Deltapine 50, PVP 8400154 / Deltapine Acala 90, PVP 8400143) // F1 (Miscot 7918/Miscot 7803-52). Morphological traits of Arkot 9721 are similar to SG105 (check cultivar), except Arkot 9721 is taller and has a more glabrous leaf and higher bract trichome density. Over 10 replicated Arkansas field tests conducted in 2004, 2005, and 2007, lint yields of Arkot were comparable to yields of SG 105 and PSC 355. Significantly low yields of Arkot 9721 compared to the check cultivars in four 2006 tests may have been due to poor quality seed. Compared to SG 105, Arkot 9721 produced higher seed index, fiber length, and uniformity index; similar open boll percent, lint index, fiber strength and fiber elongation, and lower lint percent, micronaire, seed per area, and fibers per seed. Arkot 9721 is resistance to all

U.S. races of *Xanthomonas campestris* pv. *malvacearum* (Smith) Dye, the causal agent of bacterial blight. Resistance to *Verticillium* wilt (caused by *Verticillium dahliae*, Kleb) appeared to be slightly less than SG 105 and PSC 355. Resistance of Arkot 9721 to root-knot nematode {*Meloidogyne incognita* [(Kofoid & White, 1919) Chitwood, 1949]} is equal to SG 105. Arkot 9721 is more resistant to tarnished plant bug [*Lygus lineolaris* (Palisot de Beauvois)] than SG 105, and equal to PSC 355. The most outstanding characteristics of Arkot 9721 is its high fiber quality as indicated by long fibers (30.7 mm compared to 29.1mm for checks over all tests), low micronaire (4.7 compared to 4.9 for checks), and high uniformity index (85.2% compared to 84.6 for checks).

The following were developed by Seed Research of Oregon, Inc., Corvallis, Oregon, United States; Rutgers, The State University of New Jersey, New Jersey, United States. Received 09/04/2008.

PI 654512 PVPO. *Agrostis stolonifera* var. *palustris* (Huds.) Farw.
Cultivar. "TYEE". PVP 200600254.

The following were developed by Radix Research, Inc., Aumsville, Oregon, United States. Received 09/04/2008.

PI 654513 PVPO. *Dactylis glomerata* L.
Cultivar. "SHILOH II". PVP 200800368.

The following were developed by Pioneer Hi-Bred International, Inc, United States. Received 09/04/2008.

PI 654514 PVPO. *Triticum aestivum* L.
Cultivar. Pureline. "25R39"; XW06M. PVP 200800369. Soft red winter wheat.

The following were developed by Seed Research of Oregon, Inc., Corvallis, Oregon, United States; Rutgers, The State University of New Jersey, New Jersey, United States. Received 09/04/2008.

PI 654515 PVPO. *Festuca arundinacea* Schreb.
Cultivar. "SR 8650". PVP 200800370.

The following were developed by Enza Zaden Beheer B.V., Netherlands. Received 09/04/2008.

PI 654516 PVPO. *Lactuca sativa* L.
Cultivar. "BREEN". PVP 200800374.

The following were developed by WestBred LLC, United States. Received 09/04/2008.

PI 654517 PVPO. *Hordeum vulgare* L.
Cultivar. Pureline. "CHAMPION"; YU501-385. PVP 200800382. Pedigree - Baronesse/Camas.

PI 654518 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "CARTER"; BZ9W02-2060. PVP 200800383. Pedigree -
Jagger/Rampart. Hard red winter wheat.

PI 654519 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "TILLER"; CA904-743. PVP 200800384. Pedigree -
Keystone/Granite. Hard red spring wheat.

Unknown source. Received 09/04/2008.

PI 654520 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "GOLIATH"; CA905-751. PVP 200800385. Developed in
United States. Pedigree - Express/Knudson. Hard red spring wheat.

The following were developed by WestBred LLC, United States. Received
09/04/2008.

PI 654521 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "BREAKER"; CA905-749. PVP 200800386. Pedigree -
Knudson/Alsen. Hard red spring wheat.

The following were developed by University of Georgia Research Foundation,
Inc., Athens, Georgia, United States. Received 09/02/2008.

PI 654522 PVPO. *Cucurbita maxima* Duchesne
Cultivar. "ORANGE BULLDOG". PVP 200800331.

The following were developed by Seminis Vegetable Seeds, Inc., Woodland,
California, United States. Received 09/04/2008.

PI 654523 PVPO. *Spinacia oleracea* L.
Cultivar. "SMB661114F". PVP 200800388.

PI 654524 PVPO. *Spinacia oleracea* L.
Cultivar. "SMB661086M". PVP 200800387.

The following were developed by Nunhems BV, Netherlands. Received 08/28/2008.

PI 654525 PVPO. *Lactuca sativa* L.
Cultivar. "BLACK BELT". PVP 200800308.

The following were developed by Michigan State University, Lansing, Michigan,
United States. Received 08/22/2008.

PI 654526 PVPO. *Triticum aestivum* L.
Cultivar. Pureline. "CRYSTAL"; E0027. PVP 200800367. Soft white winter
wheat.

The following were donated by Wisconsin Alumni Research Foundation, Illinois, United States. Received 09/04/2008.

PI 654527 PVPO. *Solanum tuberosum* L.
Cultivar. "VILLETTA ROSE". PVP 200300268.

The following were donated by N.I. Vavilov Research Institute of Plant Industry, 44 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Ken Street, Int. Center For Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria. Received 09/20/2007.

PI 654528. *Pisum sativum* L.
Cultivated. K-1851; IG 49365; 5804; W6 31111. Collected 1980 in Georgia.

PI 654529. *Pisum sativum* L.
Cultivated. K-4481; IG 49366; 5359; Falenskaja 42; W6 31112. Collected 1980 in Russian Federation.

PI 654530. *Pisum sativum* L.
Cultivated. K-5099; IG 49367; 5360; Chishminskij rannij; W6 31113. Collected 1980 in Russian Federation.

PI 654531. *Pisum sativum* L.
Cultivated. K-6381; IG 49370; 5361; Chishminskij 210; W6 31114. Collected 1980 in Russian Federation.

PI 654532. *Pisum sativum* L.
Cultivated. K-6747; IG 49371; 5362; Zernogradskij 9; W6 31115. Collected 1980 in Russian Federation.

PI 654533. *Pisum sativum* L.
Cultivated. K-2008; IG 52548; 5812; W6 31116. Collected 1989 in Russian Federation.

PI 654534. *Pisum sativum* L.
Cultivated. K-1439; IG 52549; 5813; Mahorn; W6 31117. Collected 1989 in Georgia.

PI 654535. *Pisum sativum* L.
Cultivated. K-1947; IG 52550; 5368; W6 31118. Collected 1989 in Russian Federation.

PI 654536. *Pisum sativum* L.
Cultivated. K-3607; IG 52551; 5814; W6 31119. Collected 1989 in Egypt.

PI 654537. *Pisum sativum* L.
Cultivated. K-4377; IG 52552; 5369; Stambovyj 219; W6 31120. Collected 1989 in Kyrgyzstan.

PI 654538. *Pisum sativum* L.
Cultivated. K-4733; IG 52553; 5370; Stambovyj 180; W6 31121. Collected 1989 in Russian Federation.

- PI 654539. *Pisum sativum* L.**
Cultivated. K-5279; IG 52555; 5372; Stambovyi 17; W6 31122. Collected 1989 in Russian Federation.
- PI 654540. *Pisum sativum* L.**
Cultivated. K-5299; IG 52556; 5373; Stambovyi 56-15; W6 31123. Collected 1989 in Ukraine.
- PI 654541. *Pisum sativum* L.**
Cultivated. K-6506; IG 52557; 5374; W6 31124. Collected 1989 in Ethiopia.
- PI 654542. *Pisum sativum* L. var. *sativum***
Cultivated. K-108; IG 122954; 3960; Smyrnese; W6 31125. Collected 1997 in Turkey.
- PI 654543. *Pisum sativum* L. var. *sativum***
Cultivated. K-238; IG 122961; 3965; W6 31132. Collected 1997 in Afghanistan.
- PI 654544. *Pisum sativum* L. var. *sativum***
Cultivated. K-2425; IG 122965; 5668; W6 31136. Collected 1997 in Kazakhstan.
- PI 654545. *Pisum sativum* L. var. *sativum***
Cultivated. K-958; IG 122966; 3968; W6 31137. Collected 1997 in Turkmenistan.
- PI 654546. *Pisum sativum* L. var. *sativum***
Cultivated. K-1093; IG 122967; 3969; W6 31138. Collected 1997 in Kazakhstan.
- PI 654547. *Pisum sativum* L. var. *sativum***
Cultivated. K-1178; IG 122968; 3970; Smirnskij; W6 31139. Collected 1997 in Turkey.
- PI 654548. *Pisum sativum* L.**
Cultivated. K-1438; IG 122976; 3975; W6 31146. Collected 1997 in Tajikistan.
- PI 654549. *Pisum sativum* L.**
Cultivated. K-1439; IG 122977; 3976; W6 31147. Collected 1997 in Tajikistan.
- PI 654550. *Pisum sativum* L.**
Cultivated. K-1441; IG 122978; 3977; W6 31148. Collected 1997 in Tajikistan.
- PI 654551. *Pisum sativum* L.**
Cultivated. K-1442; IG 122979; 5383; W6 31149. Collected 1997 in Tajikistan.
- PI 654552. *Pisum sativum* L.**
Cultivated. K-1443; IG 122980; 3978; W6 31150. Collected 1997 in Tajikistan.

- PI 654553. *Pisum sativum* L.**
Cultivated. K-1444; IG 122981; 3979; W6 31151. Collected 1997 in Tajikistan.
- PI 654554. *Pisum sativum* L.**
Cultivated. K-1445; IG 122982; 3980; W6 31152. Collected 1997 in Tajikistan.
- PI 654555. *Pisum sativum* L.**
Cultivated. K-1446; IG 122983; 5384; W6 31153. Collected 1997 in Tajikistan.
- PI 654556. *Pisum sativum* L.**
Cultivated. K-1447; IG 122984; 3981; W6 31154. Collected 1997 in Tajikistan.
- PI 654557. *Pisum sativum* L.**
Cultivated. K-1448; IG 122985; 3982; W6 31155. Collected 1997 in Tajikistan.
- PI 654558. *Pisum sativum* L.**
Cultivated. K-1464; IG 122986; 3983; W6 31156. Collected 1997 in China.
- PI 654559. *Pisum sativum* L.**
Cultivated. K-1465; IG 122987; 3984; W6 31157. Collected 1997 in China.
- PI 654560. *Pisum sativum* L.**
Cultivated. K-1466; IG 122988; 3985; W6 31158. Collected 1997 in China.
- PI 654561. *Pisum sativum* L.**
Cultivated. K-1467; IG 122989; 5385; W6 31159. Collected 1997 in China.
- PI 654562. *Pisum sativum* L.**
Cultivated. K-1469; IG 122990; 3986; W6 31160. Collected 1997 in China.
- PI 654563. *Pisum sativum* L. var. *sativum***
Cultivated. K-1539; IG 122991; 3987; W6 31161. Collected 1997 in China.
- PI 654564. *Pisum sativum* L.**
Cultivated. K-1586; IG 122992; 3988; W6 31162. Collected 1997 in Kazakhstan.
- PI 654565. *Pisum sativum* L.**
Cultivated. K-1587; IG 122993; 3989; W6 31163. Collected 1997 in Kazakhstan.
- PI 654566. *Pisum sativum* L.**
Cultivated. K-1588; IG 122994; 3990; W6 31164. Collected 1997 in Kazakhstan.
- PI 654567. *Pisum sativum* L.**
Cultivated. K-1589; IG 122995; 3991; W6 31165. Collected 1997 in Kazakhstan.
- PI 654568. *Pisum sativum* L.**
Cultivated. K-1590; IG 122996; 3992; W6 31166. Collected 1997 in Kazakhstan.

- PI 654569. *Pisum sativum* L.**
Cultivated. K-1632; IG 122998; 3993; W6 31167. Collected 1997 in Uzbekistan.
- PI 654570. *Pisum sativum* L.**
Cultivated. K-1635; IG 122999; 3994; W6 31168. Collected 1997 in Uzbekistan.
- PI 654571. *Pisum sativum* L.**
Cultivated. K-1776; IG 123000; 3995; W6 31169. Collected 1997 in Kazakhstan.
- PI 654572. *Pisum sativum* L.**
Cultivated. K-1777; IG 123001; 3996; W6 31170. Collected 1997 in China.
- PI 654573. *Pisum sativum* L. var. *sativum***
Cultivated. K-1818; IG 123002; 3997; W6 31171. Collected 1997 in Italy.
- PI 654574. *Pisum sativum* L. var. *sativum***
Cultivated. K-1820; IG 123003; 3998; VERT ACONCASSER; W6 31172. Collected 1997 in Tunisia.
- PI 654575. *Pisum sativum* L. var. *sativum***
Cultivated. K-1821; IG 123004; 3999; GROS VERT A CONCASSER; W6 31173. Collected 1997 in Tunisia.
- PI 654576. *Pisum sativum* L. var. *sativum***
Cultivated. K-1835; IG 123005; 4000; MERAVIGLIA; W6 31174. Collected 1997 in Italy.
- PI 654577. *Pisum sativum* L. var. *sativum***
Cultivated. K-1836; IG 123006; 4001; W6 31175. Collected 1997 in Ethiopia.
- PI 654578. *Pisum sativum* L. var. *sativum***
Cultivated. K-1854; IG 123007; 4002; W6 31176. Collected 1997 in Ethiopia.
- PI 654579. *Pisum sativum* L. var. *sativum***
Cultivated. K-1855; IG 123008; 4003; W6 31177. Collected 1997 in Ethiopia.
- PI 654580. *Pisum sativum* L. var. *sativum***
Cultivated. K-1856; IG 123009; 4004; W6 31178. Collected 1997 in Ethiopia.
- PI 654581. *Pisum sativum* L. var. *sativum***
Cultivated. K-1857; IG 123010; 4005; W6 31179. Collected 1997 in Ethiopia.
- PI 654582. *Pisum sativum* L. var. *sativum***
Cultivated. K-1858; IG 123011; 4006; W6 31180. Collected 1997 in Ethiopia.

- PI 654583. *Pisum sativum* L. var. *sativum***
Cultivated. K-1859; IG 123012; 4007; W6 31181. Collected 1997 in Ethiopia.
- PI 654584. *Pisum sativum* L. var. *sativum***
Cultivated. K-1860; IG 123013; 4008; W6 31182. Collected 1997 in Ethiopia.
- PI 654585. *Pisum sativum* L. var. *sativum***
Cultivated. K-1861; IG 123014; 4009; W6 31183. Collected 1997 in Ethiopia.
- PI 654586. *Pisum sativum* L. var. *sativum***
Cultivated. K-1862; IG 123015; 4010; W6 31184. Collected 1997 in Ethiopia.
- PI 654587. *Pisum sativum* L. var. *sativum***
Cultivated. K-1873; IG 123016; 4011; W6 31185. Collected 1997 in Italy.
- PI 654588. *Pisum sativum* L. var. *sativum***
Cultivated. K-1874; IG 123017; 4012; W6 31186. Collected 1997 in Italy.
- PI 654589. *Pisum sativum* L. var. *sativum***
Cultivated. K-1930; IG 123039; 4033; W6 31208. Collected 1997 in Italy.
- PI 654590. *Pisum sativum* L. var. *sativum***
Cultivated. K-1931; IG 123040; 4034; W6 31209. Collected 1997 in Italy.
- PI 654591. *Pisum sativum* L. var. *sativum***
Cultivated. K-2514; IG 123041; 5669; W6 31210. Collected 1997 in Kazakhstan.
- PI 654592. *Pisum sativum* L.**
Cultivated. K-1982; IG 123042; 4036; W6 31211. Collected 1997 in Afghanistan.
- PI 654593. *Pisum sativum* L. var. *sativum***
Cultivated. K-2172; IG 123044; 4038; W6 31213. Collected 1997 in Palestinian Territory.
- PI 654594. *Pisum sativum* L. var. *sativum***
Cultivated. K-2175; IG 123045; 4039; Bizelya; W6 31214. Collected 1997 in Turkey.
- PI 654595. *Pisum sativum* L. var. *sativum***
Cultivated. K-2224; IG 123047; 4041; W6 31215. Collected 1997 in Turkey.
- PI 654596. *Pisum sativum* L. var. *sativum***
Cultivated. K-2225; IG 123048; 4042; W6 31216. Collected 1997 in Turkey.
- PI 654597. *Pisum sativum* L. var. *sativum***
Cultivated. K-2227; IG 123049; 4043; W6 31217. Collected 1997 in Turkey.

- PI 654598. *Pisum sativum* L. var. *sativum***
Cultivated. K-2229; IG 123050; 4044; W6 31218. Collected 1997 in Turkey.
- PI 654599. *Pisum sativum* L. var. *sativum***
Cultivated. K-2231; IG 123051; 4045; W6 31219. Collected 1997 in Turkey.
- PI 654600. *Pisum sativum* L. var. *sativum***
Cultivated. K-2235; IG 123052; 4046; W6 31220. Collected 1997 in Turkey.
- PI 654601. *Pisum sativum* L. var. *sativum***
Cultivated. K-2239; IG 123053; 4047; W6 31221. Collected 1997 in Turkey.
- PI 654602. *Pisum sativum* L. var. *sativum***
Cultivated. K-2248; IG 123054; 4048; W6 31222. Collected 1997 in Turkey.
- PI 654603. *Pisum sativum* L. var. *sativum***
Cultivated. K-2251; IG 123055; 4049; W6 31223. Collected 1997 in Turkey.
- PI 654604. *Pisum sativum* L. var. *sativum***
Cultivated. K-2253; IG 123056; 4050; W6 31224. Collected 1997 in Turkey.
- PI 654605. *Pisum sativum* L. var. *sativum***
Cultivated. K-2254; IG 123057; 5388; W6 31225. Collected 1997 in Turkey.
- PI 654606. *Pisum sativum* L. var. *sativum***
Cultivated. K-2255; IG 123058; 4051; W6 31226. Collected 1997 in Turkey.
- PI 654607. *Pisum sativum* L. var. *sativum***
Cultivated. K-2256; IG 123059; 4052; W6 31227. Collected 1997 in Turkey.
- PI 654608. *Pisum sativum* L. var. *sativum***
Cultivated. K-2258; IG 123060; 4053; W6 31228. Collected 1997 in Turkey.
- PI 654609. *Pisum sativum* L. var. *sativum***
Cultivated. K-2273; IG 123061; 5389; W6 31229. Collected 1997 in Turkey.
- PI 654610. *Pisum sativum* L. var. *sativum***
Cultivated. K-2274; IG 123062; 4054; W6 31230. Collected 1997 in Turkey.
- PI 654611. *Pisum sativum* L. var. *sativum***
Cultivated. K-2293; IG 123063; 5605; W6 31231. Collected 1997 in Uzbekistan.

- PI 654612. *Pisum sativum* L.**
Cultivated. K-2420; IG 123064; 4055; W6 31232. Collected 1997 in Morocco.
- PI 654613. *Pisum sativum* L.**
Cultivated. K-2421; IG 123065; 4056; W6 31233. Collected 1997 in Morocco.
- PI 654614. *Pisum sativum* L.**
Cultivated. K-2422; IG 123066; 4057; W6 31234. Collected 1997 in Morocco.
- PI 654615. *Pisum sativum* L.**
Cultivated. K-2423; IG 123067; 4058; W6 31235. Collected 1997 in Morocco.
- PI 654616. *Pisum sativum* L.**
Cultivated. K-2424; IG 123068; 4059; W6 31236. Collected 1997 in Morocco.
- PI 654617. *Pisum sativum* L. var. *sativum***
Cultivated. K-2610; IG 123069; 5670; W6 31237. Collected 1997 in Algeria.
- PI 654618. *Pisum sativum* L. var. *sativum***
Cultivated. K-2492; IG 123075; 4065; W6 31243. Collected 1997 in Turkey.
- PI 654619. *Pisum sativum* L. var. *sativum***
Cultivated. K-2501; IG 123076; 4066; W6 31244. Collected 1997 in Turkey.
- PI 654620. *Pisum sativum* L. var. *sativum***
Cultivated. K-2502; IG 123077; 4067; W6 31245. Collected 1997 in Turkey.
- PI 654621. *Pisum sativum* L. var. *sativum***
Cultivated. K-2508; IG 123078; 4068; W6 31246. Collected 1997 in Turkey.
- PI 654622. *Pisum sativum* L.**
Cultivated. K-2516; IG 123080; 4070; W6 31248. Collected 1997 in Palestinian Territory.
- PI 654623. *Pisum sativum* L. var. *sativum***
Cultivated. K-2517; IG 123081; 4071; W6 31249. Collected 1997 in Ethiopia.
- PI 654624. *Pisum sativum* L. var. *sativum***
Cultivated. K-2518; IG 123082; 4072; W6 31250. Collected 1997 in Ethiopia.
- PI 654625. *Pisum sativum* L. var. *sativum***
Cultivated. K-2519; IG 123083; 4073; W6 31251. Collected 1997 in Ethiopia.

- PI 654626. *Pisum sativum* var. *elatius*** (Steven ex M. Bieb.) Meikle
Cultivated. K-2524; IG 123085; 4075; W6 31253. Collected 1997 in Lebanon.
- PI 654627. *Pisum sativum* L. var. *sativum***
Cultivated. K-2599; IG 123086; 5391; TELEGRAPH; W6 31254. Collected 1997 in Italy.
- PI 654628. *Pisum sativum* L. var. *sativum***
Cultivated. K-2600; IG 123087; 4076; SCIABOLA; W6 31255. Collected 1997 in Italy.
- PI 654629. *Pisum sativum* L. var. *sativum***
Cultivated. K-2601; IG 123088; 4077; W6 31256. Collected 1997 in Italy.
- PI 654630. *Pisum sativum* L. var. *sativum***
Cultivated. K-2606; IG 123089; 5392; BIANCO DI KNIGHT ZUCCHERINO; W6 31257. Collected 1997 in Italy.
- PI 654631. *Pisum sativum* L. var. *sativum***
Cultivated. IG 123090; 4078; VERDE DI KNIGHT ZUCCHERINO; W6 31258. Collected 1997 in Italy.
- PI 654632. *Pisum sativum* L. var. *sativum***
Cultivated. K-2609; IG 123091; 5393; PRECOCISSIMO D ANNONAY; W6 31259. Collected 1997 in Italy.
- PI 654633. *Pisum sativum* L. var. *sativum***
Cultivated. K-2745; IG 123092; 5672; W6 31260. Collected 1997 in Italy.
- PI 654634. *Pisum sativum* L. var. *sativum***
Cultivated. K-2611; IG 123093; 4080; UNICA; W6 31261. Collected 1997 in Italy.
- PI 654635. *Pisum sativum* L. var. *sativum***
Cultivated. K-2613; IG 123094; 4081; FILLBASKET(PLEIN LE PANIER); W6 31262. Collected 1997 in Italy.
- PI 654636. *Pisum sativum* L. var. *sativum***
Cultivated. K-2615; IG 123095; 5394; RINCOLINO NANO; W6 31263. Collected 1997 in Italy.
- PI 654637. *Pisum sativum* L. var. *sativum***
Cultivated. K-2625; IG 123096; 4082; NANO QUARANTINO; W6 31264. Collected 1997 in Italy.
- PI 654638. *Pisum sativum* L. var. *sativum***
Cultivated. K-2746; IG 123097; 5673; W6 31265. Collected 1997 in Italy.
- PI 654639. *Pisum sativum* L. var. *sativum***
Cultivated. IG 123098; 4084; PISELLO NOSTRANO RAMPICANTO; W6 31266. Collected 1997 in Italy.
- PI 654640. *Pisum sativum* L.**
Cultivated. K-2666; IG 123099; 4085; W6 31267. Collected 1997 in Uzbekistan.

- PI 654641. *Pisum sativum* L. var. *sativum***
Cultivated. IG 123100; 5608; W6 31268. Collected 1997 in Ethiopia.
- PI 654642. *Pisum sativum* L. var. *sativum***
Cultivated. K-2974; IG 123101; 5674; W6 31269. Collected 1997 in Ethiopia.
- PI 654643. *Pisum sativum* L. var. *sativum***
Cultivated. K-3119; IG 123102; 5675; W6 31270. Collected 1997 in Ethiopia.
- PI 654644. *Pisum sativum* L. var. *sativum***
Cultivated. K-2747; IG 123103; 4089; W6 31271. Collected 1997 in Ethiopia.
- PI 654645. *Pisum sativum* L. var. *sativum***
Cultivated. K-2748; IG 123104; 4090; W6 31272. Collected 1997 in Ethiopia.
- PI 654646. *Pisum sativum* L. var. *sativum***
Cultivated. K-2749; IG 123105; 4091; W6 31273. Collected 1997 in Ethiopia.
- PI 654647. *Pisum sativum* L. var. *sativum***
Cultivated. K-2750; IG 123106; 4092; W6 31274. Collected 1997 in Ethiopia.
- PI 654648. *Pisum sativum* L. var. *sativum***
Cultivated. K-2751; IG 123107; 4093; W6 31275. Collected 1997 in Ethiopia.
- PI 654649. *Pisum sativum* L. var. *sativum***
Cultivated. IG 123108; 5608; W6 31276. Collected 1997 in Ethiopia.
- PI 654650. *Pisum sativum* L. var. *sativum***
Cultivated. K-2754; IG 123109; 4095; W6 31277. Collected 1997 in Ethiopia.
- PI 654651. *Pisum sativum* L. var. *sativum***
Cultivated. K-2755; IG 123110; 4096; W6 31278. Collected 1997 in Ethiopia.
- PI 654652. *Pisum sativum* L. var. *sativum***
Cultivated. K-2756; IG 123111; 4097; W6 31279. Collected 1997 in Ethiopia.
- PI 654653. *Pisum sativum* L. var. *sativum***
Cultivated. K-2757; IG 123112; 4098; W6 31280. Collected 1997 in Ethiopia.
- PI 654654. *Pisum sativum* L. var. *sativum***
Cultivated. K-2758; IG 123113; 4099; W6 31281. Collected 1997 in Ethiopia.
- PI 654655. *Pisum sativum* L. var. *sativum***
Cultivated. K-2761; IG 123115; 4101; W6 31283. Collected 1997 in Ethiopia.

- PI 654656. *Pisum sativum* L. var. *sativum***
Cultivated. K-2762; IG 123116; 4102; W6 31284. Collected 1997 in Ethiopia.
- PI 654657. *Pisum sativum* L. var. *sativum***
Cultivated. K-2794; IG 123117; 5395; W6 31285. Collected 1997 in Ethiopia.
- PI 654658. *Pisum sativum* L. var. *sativum***
Cultivated. K-2795; IG 123118; 4103; W6 31286. Collected 1997 in Ethiopia.
- PI 654659. *Pisum sativum* L. var. *sativum***
Cultivated. K-2796; IG 123119; 4104; W6 31287. Collected 1997 in Ethiopia.
- PI 654660. *Pisum sativum* L. var. *sativum***
Cultivated. K-2797; IG 123120; 4105; W6 31288. Collected 1997 in Ethiopia.
- PI 654661. *Pisum sativum* L. var. *sativum***
Cultivated. K-2842; IG 123125; 4110; W6 31293. Collected 1997 in Ethiopia.
- PI 654662. *Pisum sativum* L. var. *sativum***
Cultivated. K-2843; IG 123126; 4111; W6 31294. Collected 1997 in Ethiopia.
- PI 654663. *Pisum sativum* L. var. *sativum***
Cultivated. K-2844; IG 123127; 4112; W6 31295. Collected 1997 in Ethiopia.
- PI 654664. *Pisum sativum* L. var. *sativum***
Cultivated. K-2845; IG 123128; 4113; W6 31296. Collected 1997 in Ethiopia.
- PI 654665. *Pisum sativum* L. var. *sativum***
Cultivated. K-2846; IG 123129; 4114; W6 31297. Collected 1997 in Ethiopia.
- PI 654666. *Pisum sativum* L. var. *sativum***
Cultivated. K-2847; IG 123130; 4115; W6 31298. Collected 1997 in Ethiopia.
- PI 654667. *Pisum sativum* L. var. *sativum***
Cultivated. K-2967; IG 123131; 4116; W6 31299. Collected 1997 in Colombia.
- PI 654668. *Pisum sativum* L. var. *sativum***
Cultivated. K-2972; IG 123132; 4117; W6 31300. Collected 1997 in Ethiopia.
- PI 654669. *Pisum sativum* L. var. *sativum***
Cultivated. K-2973; IG 123133; 4118; W6 31301. Collected 1997 in Ethiopia.

- PI 654670. *Pisum sativum* L. var. *sativum***
Cultivated. K-3142; IG 123134; 5676; W6 31302. Collected 1997 in Ethiopia.
- PI 654671. *Pisum sativum* L. var. *sativum***
Cultivated. K-2975; IG 123135; 5588; W6 31303. Collected 1997 in Italy.
- PI 654672. *Pisum sativum* L. var. *sativum***
Cultivated. K-2977; IG 123136; 4121; W6 31304. Collected 1997 in Ethiopia.
- PI 654673. *Pisum sativum* L. var. *sativum***
Cultivated. K-2978; IG 123137; 4122; W6 31305. Collected 1997 in Ethiopia.
- PI 654674. *Pisum sativum* L. var. *sativum***
Cultivated. K-3002; IG 123138; 4123; PISELLO PRIMALICCIO; W6 31306. Collected 1997 in Italy.
- PI 654675. *Pisum sativum* L. var. *sativum***
Cultivated. K-3003; IG 123139; 4124; W6 31307. Collected 1997 in Turkey.
- PI 654676. *Pisum sativum* L. var. *sativum***
Cultivated. K-3004; IG 123140; 4125; PISELLO; W6 31308. Collected 1997 in Italy.
- PI 654677. *Pisum sativum* L. var. *sativum***
Cultivated. K-3005; IG 123141; 4126; PISELLO DI FORRAGGIO; W6 31309. Collected 1997 in Italy.
- PI 654678. *Pisum sativum* L. var. *sativum***
Cultivated. K-3066; IG 123142; 4127; W6 31310. Collected 1997 in Ethiopia.
- PI 654679. *Pisum sativum* L. var. *sativum***
Cultivated. K-3068; IG 123143; 4128; W6 31311. Collected 1997 in Ethiopia.
- PI 654680. *Pisum sativum* L. var. *sativum***
Cultivated. K-3069; IG 123144; 4129; W6 31312. Collected 1997 in Ethiopia.
- PI 654681. *Pisum sativum* L. var. *sativum***
Cultivated. K-3070; IG 123145; 4130; W6 31313. Collected 1997 in Ethiopia.
- PI 654682. *Pisum sativum* L. var. *sativum***
Cultivated. K-3071; IG 123146; 4131; W6 31314. Collected 1997 in Ethiopia.
- PI 654683. *Pisum sativum* L. var. *sativum***
Cultivated. K-3072; IG 123147; 4132; W6 31315. Collected 1997 in Italy.
- PI 654684. *Pisum sativum* L. var. *sativum***
Cultivated. K-3074; IG 123148; 4133; W6 31316. Collected 1997 in Ethiopia.

- PI 654685. *Pisum sativum* L. var. *sativum***
Cultivated. K-3075; IG 123149; 4734; IG 123149; W6 31317. Collected 1997 in Ethiopia.
- PI 654686. *Pisum sativum* L. var. *sativum***
Cultivated. K-3076; IG 123150; 4735; IG 123150; W6 31318. Collected 1997 in Ethiopia.
- PI 654687. *Pisum sativum* L. var. *sativum***
Cultivated. K-3077; IG 123151; 4736; IG 123151; W6 31319. Collected 1997 in Ethiopia.
- PI 654688. *Pisum sativum* L. var. *sativum***
Cultivated. K-3078; IG 123152; 4737; IG 123152; W6 31320. Collected 1997 in Ethiopia.
- PI 654689. *Pisum sativum* L. var. *sativum***
Cultivated. K-3080; IG 123153; 4739; IG 123153; W6 31321. Collected 1997 in Ethiopia.
- PI 654690. *Pisum sativum* L. var. *sativum***
Cultivated. K-3081; IG 123154; 4740; IG 123154; W6 31322. Collected 1997 in Ethiopia.
- PI 654691. *Pisum sativum* L. var. *sativum***
Cultivated. K-3082; IG 123155; 4741; IG 123155; W6 31323. Collected 1997 in Ethiopia.
- PI 654692. *Pisum sativum* L. var. *sativum***
Cultivated. K-3083; IG 123156; 4742; IG 123156; W6 31324. Collected 1997 in Ethiopia.
- PI 654693. *Pisum sativum* L. var. *sativum***
Cultivated. K-3084; IG 123157; 4743; IG 123157; W6 31325. Collected 1997 in Ethiopia.
- PI 654694. *Pisum sativum* L. var. *sativum***
Cultivated. K-3086; IG 123158; 4744; IG 123158; W6 31326. Collected 1997 in Ethiopia.
- PI 654695. *Pisum sativum* L. var. *sativum***
Cultivated. K-3087; IG 123159; 4745; IG 123159; W6 31327. Collected 1997 in Ethiopia.
- PI 654696. *Pisum sativum* L. var. *sativum***
Cultivated. K-3089; IG 123160; 4747; IG 123160; W6 31328. Collected 1997 in Ethiopia.
- PI 654697. *Pisum sativum* L. var. *sativum***
Cultivated. K-3093; IG 123161; 5607; W6 31329. Collected 1997 in Ethiopia.
- PI 654698. *Pisum sativum* L. var. *sativum***
Cultivated. K-3091; IG 123162; 4147; W6 31330. Collected 1997 in Ethiopia.

- PI 654699. *Pisum sativum* L. var. *sativum***
Cultivated. K-3092; IG 123163; 4749; IG 123163; W6 31331. Collected 1997 in Ethiopia.
- PI 654700. *Pisum sativum* L. var. *sativum***
Cultivated. K-2744; IG 123164; 5607; W6 31332. Collected 1997 in Ethiopia.
- PI 654701. *Pisum sativum* L. var. *sativum***
Cultivated. K-3094; IG 123165; 5589; W6 31333. Collected 1997 in Ethiopia.
- PI 654702. *Pisum sativum* L. var. *sativum***
Cultivated. K-3095; IG 123166; 4752; IG 123166; W6 31334. Collected 1997 in Ethiopia.
- PI 654703. *Pisum sativum* L. var. *sativum***
Cultivated. K-3098; IG 123167; 4755; IG 123167; W6 31335. Collected 1997 in Ethiopia.
- PI 654704. *Pisum sativum* L. var. *sativum***
Cultivated. K-3099; IG 123168; 4756; IG 123168; W6 31336. Collected 1997 in Ethiopia.
- PI 654705. *Pisum sativum* L. var. *sativum***
Cultivated. K-3100; IG 123169; 4757; IG 123169; W6 31337. Collected 1997 in Ethiopia.
- PI 654706. *Pisum sativum* L. var. *sativum***
Cultivated. K-3101; IG 123170; 4758; IG 123170; W6 31338. Collected 1997 in Ethiopia.
- PI 654707. *Pisum sativum* L. var. *sativum***
Cultivated. K-3102; IG 123171; 4759; IG 123171; W6 31339. Collected 1997 in Ethiopia.
- PI 654708. *Pisum sativum* L. var. *sativum***
Cultivated. K-3103; IG 123172; 4760; IG 123172; W6 31340. Collected 1997 in Ethiopia.
- PI 654709. *Pisum sativum* L. var. *sativum***
Cultivated. K-3104; IG 123173; 4761; IG 123173; W6 31341. Collected 1997 in Ethiopia.
- PI 654710. *Pisum sativum* L. var. *sativum***
Cultivated. K-3105; IG 123174; 4762; IG 123174; W6 31342. Collected 1997 in Ethiopia.
- PI 654711. *Pisum sativum* L. var. *sativum***
Cultivated. K-3106; IG 123175; 4763; IG 123175; W6 31343. Collected 1997 in Ethiopia.
- PI 654712. *Pisum sativum* L. var. *sativum***
Cultivated. K-3107; IG 123176; 5396; PISELLO; W6 31344. Collected 1997 in Italy.

- PI 654713. *Pisum sativum* L. var. *sativum***
Cultivated. IG 123177; 5609; W6 31345. Collected 1997 in Italy.
- PI 654714. *Pisum sativum* L. var. *sativum***
Cultivated. K-3112; IG 123178; 4162; ATAR; W6 31346. Collected 1997 in Ethiopia.
- PI 654715. *Pisum sativum* L. var. *sativum***
Cultivated. K-3115; IG 123179; 4163; W6 31347. Collected 1997 in Italy.
- PI 654716. *Pisum sativum* L. var. *sativum***
Cultivated. K-3116; IG 123180; 4164; GUI SANTES GRIES FORRAJERO DE I; W6 31348. Collected 1997 in Spain.
- PI 654717. *Pisum sativum* L. var. *sativum***
Cultivated. K-3118; IG 123181; 4165; GUI SANTES FLAMENCOS; W6 31349. Collected 1997 in Spain.
- PI 654718. *Pisum sativum* L. var. *sativum***
Cultivated. IG 123182; 5677; W6 31350. Collected 1997 in Spain.
- PI 654719. *Pisum sativum* L. var. *sativum***
Cultivated. K-3131; IG 123183; 4167; W6 31351. Collected 1997 in Italy.
- PI 654720. *Pisum sativum* L. var. *sativum***
Cultivated. K-3133; IG 123184; 4168; W6 31352. Collected 1997 in Italy.
- PI 654721. *Pisum sativum* L. var. *sativum***
Cultivated. K-3138; IG 123185; 4169; W6 31353. Collected 1997 in Italy.
- PI 654722. *Pisum sativum* L. var. *sativum***
Cultivated. K-3139; IG 123186; 4170; W6 31354. Collected 1997 in Italy.
- PI 654723. *Pisum sativum* L. var. *sativum***
Cultivated. K-3140; IG 123187; 4171; W6 31355. Collected 1997 in Spain.
- PI 654724. *Pisum sativum* L. var. *sativum***
Cultivated. K-5186; IG 123188; 5678; W6 31356. Collected 1997 in Spain.
- PI 654725. *Pisum sativum* L. var. *sativum***
Cultivated. K-3143; IG 123189; 4173; W6 31357. Collected 1997 in Spain.
- PI 654726. *Pisum sativum* L. var. *sativum***
Cultivated. K-3144; IG 123190; 4174; W6 31358. Collected 1997 in Spain.
- PI 654727. *Pisum sativum* L. var. *sativum***
Cultivated. K-3146; IG 123191; 4175; W6 31359. Collected 1997 in Spain.
- PI 654728. *Pisum sativum* L. var. *sativum***
Cultivated. K-3148; IG 123192; 4176; W6 31360. Collected 1997 in Spain.
- PI 654729. *Pisum sativum* L. var. *sativum***
Cultivated. K-3151; IG 123193; 4177; W6 31361. Collected 1997 in Spain.
- PI 654730. *Pisum sativum* L. var. *sativum***
Cultivated. K-3152; IG 123194; 4178; W6 31362. Collected 1997 in Spain.

- PI 654731. *Pisum sativum* L. var. *sativum***
Cultivated. K-3153; IG 123195; 4179; W6 31363. Collected 1997 in Spain.
- PI 654732. *Pisum sativum* L. var. *sativum***
Cultivated. K-3154; IG 123196; 4180; W6 31364. Collected 1997 in Spain.
- PI 654733. *Pisum sativum* L. var. *sativum***
Cultivated. K-3158; IG 123197; 5397; W6 31365. Collected 1997 in Portugal.
- PI 654734. *Pisum sativum* L. var. *sativum***
Cultivated. K-3163; IG 123198; 4181; W6 31366. Collected 1997 in Portugal.
- PI 654735. *Pisum sativum* L. var. *sativum***
Cultivated. K-3164; IG 123199; 4182; W6 31367. Collected 1997 in Portugal.
- PI 654736. *Pisum sativum* L. var. *sativum***
Cultivated. K-3166; IG 123200; 5398; W6 31368. Collected 1997 in Portugal.
- PI 654737. *Pisum sativum* L. var. *sativum***
Cultivated. K-3169; IG 123201; 4183; W6 31369. Collected 1997 in Spain.
- PI 654738. *Pisum sativum* L. var. *sativum***
Cultivated. K-3171; IG 123202; 4184; W6 31370. Collected 1997 in Spain.
- PI 654739. *Pisum sativum* L. var. *sativum***
Cultivated. K-3172; IG 123203; 4185; W6 31371. Collected 1997 in Italy.
- PI 654740. *Pisum sativum* L. var. *sativum***
Cultivated. K-3175; IG 123204; 4186; PISELLI; W6 31372. Collected 1997 in Italy.
- PI 654741. *Pisum sativum* L. var. *sativum***
Cultivated. K-3177; IG 123205; 4187; W6 31373. Collected 1997 in Italy.
- PI 654742. *Pisum sativum* L. var. *sativum***
Cultivated. K-3178; IG 123206; 4188; W6 31374. Collected 1997 in Italy.
- PI 654743. *Pisum sativum* L. var. *sativum***
Cultivated. K-5054; IG 123207; 4189; Belyi; W6 31375. Collected 1997 in China.
- PI 654744. *Pisum sativum* L. var. *sativum***
Cultivated. K-5055; IG 123208; 4190; Sladkii; W6 31376. Collected 1997 in China.
- PI 654745. *Pisum sativum* L. var. *sativum***
Cultivated. K-5058; IG 123209; 4191; Vai-pi-CHzhun; W6 31377. Collected 1997 in China.
- PI 654746. *Pisum sativum* L. var. *sativum***
Cultivated. K-5059; IG 123210; 4192; Sladkii KHun-van'-doul; W6 31378. Collected 1997 in China.

- PI 654747. *Pisum sativum* L. var. *sativum***
Cultivated. K-5060; IG 123211; 4193; Bai-van'-dou; W6 31379. Collected 1997 in China.
- PI 654748. *Pisum sativum* L. var. *sativum***
Cultivated. K-5152; IG 123212; 5610; W6 31380. Collected 1997 in China.
- PI 654749. *Pisum sativum* L. var. *sativum***
Cultivated. IG 123213; 5611; W6 31381. Collected 1997 in Kyrgyzstan.
- PI 654750. *Pisum sativum* L. var. *sativum***
Cultivated. IG 123214; 5592; W6 31382. Collected 1997 in Kyrgyzstan.
- PI 654751. *Pisum sativum* L. var. *sativum***
Cultivated. K-5106; IG 123215; 4197; Snezhinka 85; W6 31383. Collected 1997 in Kyrgyzstan.
- PI 654752. *Pisum sativum* L. var. *sativum***
Cultivated. K-5107; IG 123216; 5593; W6 31384. Collected 1997 in Kyrgyzstan.
- PI 654753. *Pisum sativum* L. var. *sativum***
Cultivated. IG 123217; 5594; W6 31385. Collected 1997 in Kazakhstan.
- PI 654754. *Pisum sativum* L. var. *sativum***
Cultivated. K-5170; IG 123218; 5612; W6 31386. Collected 1997 in China.
- PI 654755. *Pisum sativum* L. var. *sativum***
Cultivated. IG 123219; 5595; W6 31387. Collected 1997 in China.
- PI 654756. *Pisum sativum* L. var. *sativum***
Cultivated. K-5416; IG 123220; 5613; W6 31388. Collected 1997 in China.
- PI 654757. *Pisum sativum* L. var. *sativum***
Cultivated. K-5155; IG 123221; 4203; YUn-nin -van'-dou; W6 31389.
Collected 1997 in China.
- PI 654758. *Pisum sativum* L. var. *sativum***
Cultivated. K-5156; IG 123222; 4204; CHzhan-i-bai-tszan'-dou; W6 31390.
Collected 1997 in China.
- PI 654759. *Pisum sativum* L. var. *sativum***
Cultivated. K-5161; IG 123223; 4205; CHzhen-i-bai-van'-dou; W6 31391.
Collected 1997 in China.
- PI 654760. *Pisum sativum* L. var. *sativum***
Cultivated. K-5162; IG 123224; 4206; I-li-da-li-van'-dou; W6 31392.
Collected 1997 in China.
- PI 654761. *Pisum sativum* L. var. *sativum***
Cultivated. K-5163; IG 123225; 4207; An-kan-ma-van'-dou; W6 31393.
Collected 1997 in China.
- PI 654762. *Pisum sativum* L. var. *sativum***
Cultivated. K-5164; IG 123226; 4208; YAn-sen'-syao-mya-van'-dou; W6 31394.
Collected 1997 in China.

- PI 654763. *Pisum sativum* L. var. *sativum***
Cultivated. K-5165; IG 123227; 4209; Fyn-sen'-van'-dou; W6 31395.
Collected 1997 in China.
- PI 654764. *Pisum sativum* L. var. *sativum***
Cultivated. K-5166; IG 123228; 4210; U-chun-van'-dou; W6 31396.
Collected 1997 in China.
- PI 654765. *Pisum sativum* L. var. *sativum***
Cultivated. K-5167; IG 123229; 4211; Sen'-yan-van'-dou; W6 31397.
Collected 1997 in China.
- PI 654766. *Pisum sativum* L. var. *sativum***
Cultivated. K-5168; IG 123230; 4212; Tun-guan-van'-dou; W6 31398.
Collected 1997 in China.
- PI 654767. *Pisum sativum* L. var. *sativum***
Cultivated. K-5169; IG 123231; 4213; KHuan-sen'-van'-dou; W6 31399.
Collected 1997 in China.
- PI 654768. *Pisum sativum* L. var. *sativum***
Cultivated. K-5959; IG 123232; 5614; W6 31400. Collected 1997 in China.
- PI 654769. *Pisum sativum* L. var. *sativum***
Cultivated. K-5425; IG 123233; 5679; W6 31401. Collected 1997 in China.
- PI 654770. *Pisum sativum* L. var. *sativum***
Cultivated. K-5172; IG 123234; 4216; TSen'-sen'-van'-dou; W6 31402.
Collected 1997 in China.
- PI 654771. *Pisum sativum* L. var. *sativum***
Cultivated. K-5173; IG 123235; 4217; Lun -sen'-van'-dou; W6 31403.
Collected 1997 in China.
- PI 654772. *Pisum sativum* L. var. *sativum***
Cultivated. K-5174; IG 123236; 4218; Da-lin-ben-van'-dou; W6 31404.
Collected 1997 in China.
- PI 654773. *Pisum sativum* L. var. *sativum***
Cultivated. K-5175; IG 123237; 4219; Da-li-san'-yue-khuan; W6 31405.
Collected 1997 in China.
- PI 654774. *Pisum sativum* L. var. *sativum***
Cultivated. K-5176; IG 123238; 4220; Pu-chen -san'-yue-khuan; W6 31406.
Collected 1997 in China.
- PI 654775. *Pisum sativum* L. var. *sativum***
Cultivated. IG 123239; 5596; W6 31407. Collected 1997 in China.
- PI 654776. *Pisum sativum* L. var. *sativum***
Cultivated. K-5178; IG 123240; 4222; CHan-u-van'-dou; W6 31408.
Collected 1997 in China.
- PI 654777. *Pisum sativum* L. var. *sativum***
Cultivated. K-5179; IG 123241; 4223; Pin-lyan-ma-van'-dou; W6 31409.
Collected 1997 in China.

- PI 654778. *Pisum sativum* L. var. *sativum***
Cultivated. K-5180; IG 123242; 4224; TSin-yan-van'-dou; W6 31410.
Collected 1997 in China.
- PI 654779. *Pisum sativum* L. var. *sativum***
Cultivated. K-5181; IG 123243; 4225; Lan'-ezhou-van'-dou; W6 31411.
Collected 1997 in China.
- PI 654780. *Pisum sativum* L. var. *sativum***
Cultivated. K-5183; IG 123244; 4226; Bai-shui-tsun'-van'-dou; W6 31412.
Collected 1997 in China.
- PI 654781. *Pisum sativum* L. var. *sativum***
Cultivated. K-5184; IG 123245; 4227; YUi-lin'-van'-dou; W6 31413.
Collected 1997 in China.
- PI 654782. *Pisum sativum* L. var. *sativum***
Cultivated. IG 123247; 5680; W6 31414. Collected 1997 in China.
- PI 654783. *Pisum sativum* L. var. *sativum***
Cultivated. K-5187; IG 123248; 4230; CHzhan-i-syao-mao-dou; W6 31415.
Collected 1997 in China.
- PI 654784. *Pisum sativum* L. var. *sativum***
Cultivated. K-5188; IG 123249; 5399; I-li-van'-dou; W6 31416.
Collected 1997 in China.
- PI 654785. *Pisum sativum* L. var. *sativum***
Cultivated. K-5189; IG 123250; 4231; TSin-khai-van'-dou; W6 31417.
Collected 1997 in China.
- PI 654786. *Pisum sativum* L. var. *sativum***
Cultivated. K-5190; IG 123251; 4232; Bai-van'-dou; W6 31418. Collected
1997 in China.
- PI 654787. *Pisum sativum* L. var. *sativum***
Cultivated. K-5191; IG 123252; 4233; CHan-tszi-fin-shi-do-li-van'-d; W6
31419. Collected 1997 in China.
- PI 654788. *Pisum sativum* L. var. *sativum***
Cultivated. K-5192; IG 123253; 4234; Zelenyi; W6 31420. Collected 1997
in China.
- PI 654789. *Pisum sativum* L. var. *sativum***
Cultivated. K-5234; IG 123254; 4235; Gibrud 801; W6 31421. Collected
1997 in Kyrgyzstan.
- PI 654790. *Pisum sativum* L. var. *sativum***
Cultivated. K-5253; IG 123255; 4236; W6 31422. Collected 1997 in China.
- PI 654791. *Pisum sativum* L. var. *sativum***
Cultivated. K-5254; IG 123256; 4237; Yarkend; W6 31423. Collected 1997
in China.
- PI 654792. *Pisum sativum* L. var. *sativum***
Cultivated. K-5256; IG 123258; 4238; Ak-puchak; W6 31424. Collected
1997 in China.

- PI 654793. *Pisum sativum* L. var. *sativum***
Cultivated. K-5258; IG 123259; 4239; Smes' sortov; W6 31425. Collected 1997 in China.
- PI 654794. *Pisum sativum* L. var. *sativum***
Cultivated. K-5259; IG 123260; 4240; Kormovoi; W6 31426. Collected 1997 in China.
- PI 654795. *Pisum sativum* L. var. *sativum***
Cultivated. K-5260; IG 123261; 5400; Pyatnistyi; W6 31427. Collected 1997 in China.
- PI 654796. *Pisum sativum* L. var. *sativum***
Cultivated. K-5265; IG 123262; 4241; Lan'chzhouskii kormovoi; W6 31428. Collected 1997 in China.
- PI 654797. *Pisum sativum* L. var. *sativum***
Cultivated. K-5412; IG 123263; 4242; W6 31429. Collected 1997 in Ethiopia.
- PI 654798. *Pisum sativum* L. var. *sativum***
Cultivated. K-5413; IG 123264; 4243; W6 31430. Collected 1997 in Ethiopia.
- PI 654799. *Pisum sativum* L. var. *sativum***
Cultivated. K-5414; IG 123265; 4244; W6 31431. Collected 1997 in Ethiopia.
- PI 654800. *Pisum sativum* L. var. *sativum***
Cultivated. K-5415; IG 123266; 4245; W6 31432. Collected 1997 in Ethiopia.
- PI 654801. *Pisum sativum* L. var. *sativum***
Cultivated. K-830; IG 123267; 5615; W6 31433. Collected 1997 in Ethiopia.
- PI 654802. *Pisum sativum* L. var. *sativum***
Cultivated. K-5417; IG 123268; 4247; W6 31434. Collected 1997 in Ethiopia.
- PI 654803. *Pisum sativum* L. var. *sativum***
Cultivated. K-5418; IG 123269; 4248; W6 31435. Collected 1997 in Ethiopia.
- PI 654804. *Pisum sativum* L. var. *sativum***
Cultivated. K-5419; IG 123270; 4249; W6 31436. Collected 1997 in Ethiopia.
- PI 654805. *Pisum sativum* L. var. *sativum***
Cultivated. K-5420; IG 123271; 4250; W6 31437. Collected 1997 in Ethiopia.
- PI 654806. *Pisum sativum* L. var. *sativum***
Cultivated. K-5421; IG 123272; 4251; W6 31438. Collected 1997 in Ethiopia.

- PI 654807. *Pisum sativum* L. var. *sativum***
Cultivated. K-5422; IG 123273; 4252; W6 31439. Collected 1997 in Ethiopia.
- PI 654808. *Pisum sativum* L. var. *sativum***
Cultivated. K-5423; IG 123274; 4253; W6 31440. Collected 1997 in Ethiopia.
- PI 654809. *Pisum sativum* L. var. *sativum***
Cultivated. K-5424; IG 123275; 4254; W6 31441. Collected 1997 in Ethiopia.
- PI 654810. *Pisum sativum* L. var. *sativum***
Cultivated. K-93; IG 123276; 5681; W6 31442. Collected 1997 in Ethiopia.
- PI 654811. *Pisum sativum* L. var. *sativum***
Cultivated. K-1748; IG 123277; 5682; W6 31443. Collected 1997 in Egypt.
- PI 654812. *Pisum sativum* L. var. *sativum***
Cultivated. K-5429; IG 123278; 4256; W6 31444. Collected 1997 in Ethiopia.
- PI 654813. *Pisum sativum* L. var. *sativum***
Cultivated. K-5519; IG 123280; 4257; Uzbekskii - 71; W6 31445. Collected 1997 in Uzbekistan.
- PI 654814. *Pisum sativum* L. var. *sativum***
Cultivated. K-5521; IG 123281; 4258; Uzbekskii 110; W6 31446. Collected 1997 in Uzbekistan.
- PI 654815. *Pisum sativum* L. var. *sativum***
Cultivated. K-5539; IG 123282; 4259; Uzbekskii -97; W6 31447. Collected 1997 in Uzbekistan.
- PI 654816. *Pisum sativum* L. var. *sativum***
Cultivated. K-5569; IG 123283; 4260; W6 31448. Collected 1997 in Afghanistan.
- PI 654817. *Pisum sativum* L. var. *sativum***
Cultivated. K-5596; IG 123284; 4261; UZBEKSKII 69; W6 31449. Collected 1997 in Uzbekistan.
- PI 654818. *Pisum sativum* L. var. *sativum***
Cultivated. K-5597; IG 123285; 4262; UZBEKSKII 75; W6 31450. Collected 1997 in Uzbekistan.
- PI 654819. *Pisum sativum* L. var. *sativum***
Cultivated. K-5599; IG 123287; 5403; UZBEKSKII 97; W6 31451. Collected 1997 in Uzbekistan.
- PI 654820. *Pisum sativum* L. var. *sativum***
Cultivated. K-5600; IG 123288; 4263; UZBEKSKII 110; W6 31452. Collected 1997 in Uzbekistan.

PI 654821. *Pisum sativum* L. var. *sativum*

Cultivated. K-5601; IG 123289; 4264; UZBEKSKII 113-S; W6 31453.
Collected 1997 in Uzbekistan.

PI 654822. *Pisum sativum* L. var. *sativum*

Cultivated. K-5602; IG 123290; 4265; UZBEKSKII 113; W6 31454.
Collected 1997 in Uzbekistan.

The following were developed by Thomas Tew, USDA, ARS, SRRC, Sugarcane Research Unit, 5883 USDA Road, Houma, Louisiana 70361-0470, United States. Received 09/19/2008.

PI 654823. *Saccharum* sp.

Cultivar. "HoCP 00-950". CV-135. Pedigree - HoCP 93-750 x HoCP 92-676. The canopy of HoCP 00-950 is open semi-droopy. Leaf length and width of HoCP 00-950 is in the range of 150-160 cm x 33-35 mm. HoCP 00-950 has a distinctive and easily discernable leaf characteristic, seen especially in juvenile plants, namely the tendency of its leaf blades to roll in an adaxial direction on both sides of the midrib, rather than remaining flat. The dewlaps (collars) of HoCP 00-950 are narrow and squarish with an olive-green color that tends to turn browner with age and exposure to sunlight. The average auricle shape is long lanceolate, often greater than 2 cm long. The auricles in the upper portion of the canopy do not appear dead or straw colored. HoCP 00-950 exhibits a tan-colored, broad crescent-shaped ligule having a length of 150 mm and a width of 45 mm, with a torn, darker brown edge. HoCP 00-950 exhibits only a slight amount of setaceous hair on the abaxial side of the leaf sheath. The rind color on stalks of HoCP 00-950 is green to yellowish-green, when the stalks are unexposed [Microsoft Paint (bmp): Hue: 40, Sat: 170, Lum: 80, Red: 145, Green: 145, Blue: 25]. Stalks of HoCP 00-950 become light brown colored [Microsoft Paint: Hue: 15, Sat: 130, Lum: 130, Red: 200, Green: 130, Blue: 80] when exposed to sunlight. A white wax bloom covers the stalks of HoCP 00-950. The average stalk diameter of HoCP 00-950 at mid-internode in the plant-cane crop is 21.5 mm. HoCP 00-950 exhibits a rather distinctive obconoidal-shaped internode, sufficiently different from the near-cylindrical internodes of most commercial cultivars that this characteristic has proven to be useful for identification purposes. The internodes of HoCP 00-950 occasionally exhibit growth cracks. HoCP 00-950 exhibits an oval but sometimes round bud shape with a central germ pore. The bud diameter of HoCP 00-950 is usually about 5 mm, which is smaller than that of most commercial cultivars. The buds of HoCP 00-950 rarely extend above the growth ring. HoCP 00-950 does n.

The following were developed by Don Obert, USDA-ARS, 1691 S. 2700 W., Aberdeen, Idaho 83210, United States. Received 09/23/2008.

PI 654824. *Hordeum vulgare* L. subsp. *vulgare*

Cultivar. Pureline. "ENDEAVOR"; 95Ab2299; NSGC 19371. Pedigree - ORWM8406 [Carstens/Riso Mutant 1508//Cossack] /Harrington. Winter two-row malt barley. Compared to 'Charles', 'Endeavor' is on average 3.6 cm taller and heads two days later (143 vs. 141 Julian days). Straw strength is similar to Charles, as Endeavor has averaged 1.8 vs. 1.7 (0-9) for Charles across 12 location-years where significant lodging occurred. Winter hardiness for Endeavor is similar to Charles, as

neither has excellent winter survivability. From 2003-2005 mild winter conditions resulted in no winter kill. In 2006 at Pullman, WA, Endeavor and Charles both averaged 98 percent survivability. In 2007, under severe winter conditions at Pullman, WA, Endeavor had significantly less winter survivability (39.1 percent) than Charles with 63.0 percent (LSD.05=16.5) Endeavor has a semi-lax spike that slightly nods at maturity. The spike has rough awns, long rachilla hairs, and glume hairs that are banded, tending to covered, with glume awns being 2X the length of glume. The laterals are sterile, long, and awnless, with barbs at the apex. The kernel has white aleurone, prominent veins without barbs, and a crease that is open, flaring to a V shape. The hull is adhering, slightly wrinkled, tending to smooth. The rachis has numerous hairs along margins.

The following were collected by Truong Trong Ngon, Can Tho University, Department of Crop Sciences, 3/2 Street, Can Tho, Vietnam. Received 09/17/2008.

- PI 654825. *Glycine max* (L.) Merr.**
Cultivated. "Binh Dinh"; SY 809001. Collected 09/17/2008 in Binh Dinh, Vietnam. Latitude 13° 48' 18" N. Longitude 108° 47' 2" E.
- PI 654826. *Glycine max* (L.) Merr.**
Cultivated. "Krongbak (W-flower)"; SY 809002. Collected 09/17/2008 in Dac Lac, Vietnam. Latitude 12° 37' 18" N. Longitude 108° 12' 8" E.
- PI 654827. *Glycine max* (L.) Merr.**
Cultivated. "Krongbak (P_Flower)"; SY 809003. Collected 09/17/2008 in Dac Lac, Vietnam. Latitude 12° 37' 18" N. Longitude 108° 12' 8" E.
- PI 654828. *Glycine max* (L.) Merr.**
Cultivated. "Dakmil"; SY 809004. Collected 09/17/2008 in Dac Lac, Vietnam. Latitude 12° 12' 28" N. Longitude 107° 23' 15" E.
- PI 654829. *Glycine max* (L.) Merr.**
Cultivated. "Phu Cat"; SY 809005. Collected 09/17/2008 in Binh Dinh, Vietnam. Latitude 13° 58' 3" N. Longitude 109° 10' 8" E.
- PI 654830. *Glycine max* (L.) Merr.**
Cultivated. "Phuong Lam"; SY 809006. Collected 09/17/2008 in Lam Dong, Vietnam. Latitude 11° 32' 44" N. Longitude 107° 48' 50" E. City of Da lat.
- PI 654831. *Glycine max* (L.) Merr.**
Cultivated. "Dung Xuyen (W-Flower)"; SY 809007. Collected 09/17/2008 in Quang Nam, Vietnam. Latitude 15° 40' 11" N. Longitude 108° 13' 19" E.
- PI 654832. *Glycine max* (L.) Merr.**
Cultivated. "Dung Xuyen (P-Flower)"; SY 809008. Collected 09/17/2008 in Quang Nam, Vietnam. Latitude 15° 40' 11" N. Longitude 108° 13' 19" E.
- PI 654833. *Glycine max* (L.) Merr.**
Cultivated. "My Hung"; SY 809009. Collected 09/17/2008 in Soc Trang, Vietnam. Latitude 9° 50' 14" N. Longitude 105° 25' 10" E.

The following were donated by Albert Newcomb, Thermal Plaza Nursery, 68035 P Highway 86, Thermal, California 92274, United States. Received 04/1999.

PI 654834. Citrus hybrid

Cultivar. "CHIRONJA"; VI 559; IPPN 126; RCRC 4045. Pedigree - "Chironja", although used as a cultivar name, actually refers to a group of apparently naturally occurring sweet orange x grapefruit hybrids originating in Puerto Rico (and possibly other Caribbean areas). This selection of 'Chironja' is stated by the donor to be superior to the previously established accession (PI 539489/RCRC 3909), which was CAPP VI 436.

The following were donated by Andrew Harty, Kerifresh Ltd., Waipapa Road, RD 2, Kerikeri, New Zealand; R. Vogel, Station de Recherches Agronomiques de Corse, INRA, San Giuliano 20230, San Nicolao, Corsica, France. Received 02/1999.

PI 654835. Citrus clementina hort. ex Tanaka

Cultivar. "Corsica #1"; SRA 362; IPPN 196; VI 604; RCRC 4046. Pedigree - The SRA selections originated in the 1960's as selections of Moroccan Clementines made at the Station de Recherches Agrumicoles, San Giuliano, Corsica. SRA 362 ('Corsica #1') was a selection of 'Fina' made by Rene Ristorelli of Domaines Royaux, Saida, Rabat, Morocco, in 1962.

The following were developed by Andrew Harty, Kerifresh Ltd., Waipapa Road, RD 2, Kerikeri, New Zealand. Received 06/2001.

PI 654836. Citrus unshiu Marcow.

"Miho Wase"; VI 585; IPPN 145; RCRC 4047. Pedigree - Originated as sister nucellar seedling to 'Okitsu' from a controlled pollination of 'Miyagawa' with *P. trifoliata* made by Drs M Kajiura and T Iwasaki at the Horticultural Research Station, Okitsu, Shinisu, Shizuoka, Japan, in 1940. It was registered in 1963.

The following were donated by Ottillia Bier, University of California, Botany and Plant Sciences, Riverside, California 92521, United States. Received 03/1999.

PI 654837. X Citrofortunella swinglei J. W. Ingram & H. E. Moore

Cultivar. "Tavares"; I2000-17; RCRC 4048; C1999-03; CPB 48792. Pedigree - 'Tavares' limequat resulted from a cross of West Indian lime and oval kumquat (*Fortunella margarita*) made by WT Swingle in Florida in 1909. See *J Agric Res*, 23:229-238, 1921. This accession was introduced because PI 539804 (RCRC 3172), which had previously been identified as 'Tavares', does not match the description, and should be considered a lemon hybrid (see notes referenced accession). RCRC 4048 does match the published description and is now the accession of record for 'Tavares'. (RRK, 08/2006).

The following were donated by Andrew Harty, Kerifresh Ltd., Waipapa Road, RD 2, Kerikeri, New Zealand. Received 02/1999.

PI 654838. *Citrus reticulata* Blanco

Cultivar. "MICHAL"; IPPN 189; VI 601; RCRC 4049. Developed in Israel. Pedigree - Believed to be a natural hybrid of 'Clementine' and 'Dancy'. Said to have good fruit quality, earliness, and peelability, but with tendency to alternate bear, small fruit size, and variable seediness. Possibly of interest in desert areas. (RRK, 08/2006).

The following were donated by Catalina Anderson, INTA, Estacion Experimental Agropecuaria, Casillo de Correo No. 34, Concordia, Entre Rios, Argentina. Received 02/1999.

PI 654839. *Citrus sinensis* (L.) Osbeck

Cultivar. "COGAN"; VI 608; IPPN 104; RCRC 4050. Pedigree - This variety was selected (from Parent Washington) on the property of Mr. Cogan. (Donor's notes). Tree and fruit resemble that of 'Robertson' navel orange but the fruit matures earlier (4th week of March in Argentina). Trees on trifoliolate have a poor growth (probably affected by exocortis). (Notes from Donor) Removal of exocortis by STG should improve performance. (RRK, 08/2006).

The following were donated by John Bash, University of California, Citrus Clonal Protection Program, Dept of Plant Pathology, Riverside, California 92521, United States. Received 02/1999.

PI 654840. *Citrus sinensis* (L.) Osbeck

Cultivar. "TIBBETTS PARENT WASHINGTON"; IPPN 124; VI 622; RCRC 4051. Developed in Brazil. Pedigree - Probably a limb sport of the 'Selecta' variety found near Bahia, Brazil, and first propagated between 1810 and 1820. An alternative theory is that the parent variety was the Portugese navel ('Umbigo') and originated earlier. See The Citrus Industry, 1967, Vol 1, pp 483-485. Name means 'wide mandarin'.

The following were developed by Institut Francais Recherches Fruitieres Outre-mer, Rabat, Morocco; INRA Station de Recherche Agronomique, San Giuliano 20230, San Nicolao, Corsica, France. Donated by Andrew Harty, Kerifresh Ltd., Waipapa Road, RD 2, Kerikeri, New Zealand. Received 02/2001.

PI 654841. *Citrus clementina* hort. ex Tanaka

Cultivar. "SRA 92 CLEMENTINE"; SRA 92; VI 624; IPPN 199; RCRC 4052. Pedigree - The SRA selections originated in the 1960's as selections of Moroccan Clementines made at the Station de Recherches Agrumicoles, San Guiliano, Corsica. SRA 92 is a selection of 'Comune' ('Algerian') from the Institut Francais de Recherche Fruitiere, Rabat, Morocco, made in 1960. According to Saunt (Citrus Varieties of the World, 2000), this is supposed to be one of the best of the SRA selections, but not much information is available on it.

The following were donated by Cesar Enrique Miranda-Ortiz, Viveros Miranda, Zacatecas 145 Norte, Ciudad Obregon, Sonora 85010, Mexico. Received 02/2001.

PI 654842. Citrus limettioides Tanaka

Cultivar. "MARY ELLEN"; IPPN 224; VI 625; RCRC 4053. Pedigree - Selection of Mexican-type lime.

The following were donated by INRA Station de Recherche Agronomique, San Giuliano 20230, San Nicolao, Corsica, France. Received 02/2001.

PI 654843. Citrus clementina hort. ex Tanaka

Cultivar. "CLEMENTINE 2000"; "CARTE NOIR"; "BEKRIA"; SRA 646; IPPN 231; VI 627; RCRC 4054. Developed in Morocco. Pedigree - This is a Moroccan selection of a natural mutation, discovered in 1968. This variety is said to be very early (September in Morocco) and seedless when pollinators absent, but with low acid and poor rind color. (RRK, 08/2006).

The following were donated by Luis Navarro, IVIA, Apartado Oficial 46071, Carretera de Moncada a Naquera km 4.5, Moncada, Valencia 46113, Spain. Received 02/2001.

PI 654844. Citrus clementina hort. ex Tanaka

Cultivar. "CLEMENTINA MARISOL"; "MARISOL"; IVIA 93; IPPN 267; VI 629; RCRC 4055. Developed in Spain. Pedigree - A Spanish selection of a mutation of 'Oroval'. 'Marisol' has fruit characteristics very similar to those of 'Oroval', but matures about 2 weeks earlier (late September to early October in Spain). It is normally harvested soon after color break and subsequently de-greened, and it has a tendency to puff and granulate if hung too long. 'Marisol' generally makes a good crop without the use of PGR treatments. 'Marisol' has been extensively planted in Spain in recent years and has also received some interest in Argentina and California. (RRK, 08/2006).

PI 654845. Citrus clementina hort. ex Tanaka

Cultivar. "REINA Y GORDA DE NULES"; "CLEMENTINA DE NULES"; "CLEMENULES"; "NULESINA"; "CLEMENTINA VICTORIA"; "NULES"; IVIA 22; IPPN 269; VI 630; RCRC 4056. Developed in Spain. Pedigree - A mutation of Clementina 'Fina'. Larger and a few days earlier than 'Fina'; seedless and high fruit quality; hangs moderately well but tends to puff if held too long. The most widely grown 'Clementine' in Spain. (RRK, 08/2006).

PI 654846. Citrus clementina hort. ex Tanaka

Cultivar. "CLEMENTINA NOUR"; "NOUR"; IVIA 350; IPPN 271; VI 632; RCRC 4057. Developed in Morocco. Pedigree - A mutation of 'Cadoux' clementine. Medium sized with a slightly coarse rind; matures late January or early February; does not store well on tree; extensively planted in Morocco. Some interest in Spain as an alternative to 'Hernandina' as a late clementine variety. (RRK, 08/2006).

The following were collected by Gordon Johnson, Keri Keri, North Island, New Zealand. Donated by Andrew Harty, Kerifresh Ltd., Waipapa Road, RD 2, Kerikeri, New Zealand. Received 02/2001.

PI 654847. Citrus sinensis (L.) Osbeck

Cultivar. "JOHNSON"; IPPN 200; VI 634; RCRC 4059. Developed in Australia. Collected 1930 in North Island, New Zealand. Pedigree - A

budline of 'Washington' navel. As of 1991 'Johnson' was the standard navel cultivar in the Keri Keri district. Fruit matures from July to early September. The tree is vigorous with a semi-upright habit. The fruit are large, have a globose shape and an orange rind colour. The rind is moderately thick (5-7mm) and difficult to peel. The flesh is orange in colour, sweet, juicy and seedless, but difficult to segment. An excellent quality early season navel orange. (Notes by Pauline Mooney and Peter Anderson MAFTechnology, Keri Keri Hort Research Station, in "The Orchardist", June 1991) (RRK, 08/2006).

The following were collected by H Huang, Auburn University, Auburn, Alabama, United States. Donated by William A. Dozier, Auburn University, Department of Horticulture, 101 Funchess Hall, Auburn, Alabama 36849, United States; David J. Gumpf, University of California, Department of Plant Pathology, Riverside, California 92521, United States. Received 02/2001.

PI 654848. Citrus unshiu Marcow.

Cultivar. HU 9; "CHINA SATSUMA S-2"; VI 635; IPPN 174; RCRC 4060. Collected 08/1995 in Hubei, China. Pedigree - Unknown. Probable budsport, as satsumas are generally seedless. Collector rated tree vigor and cold hardiness as "very good" and fruit quality as "good". (RRK, 08/2006).

PI 654849. Citrus unshiu Marcow.

Cultivar. HU 5; "CHINA SATSUMA S-9"; VI 636; IPPN 180; RCRC 4061. Developed in Japan. Collected 08/1995 in Hubei, China. Pedigree - Unknown. Probable budsport, as satsumas are generally seedless. This line was has a name, which could not be translated into English by the collector (letter from WA Dozier, Chair, Auburn Univ Dept of Horticulture, to DJ Gumpf, 08-28-1995). Collector rated tree vigor and cold hardiness as "good" and fruit quality as "very good". (RRK, 08/2006).

The following were donated by Fernando Castelo, Los Chulos S.P.R. de R.I., Paseo Villafontana #1404, Col. Villafontana, Obregon, Sonora 85096, Mexico. Received 02/2001.

PI 654850. Citrus aurantiifolia (Christm.) Swingle

Cultivar. "CASTELO"; IPPN 223; VI 637; RCRC 4062. Pedigree - Selection of Mexican lime by Raul Gonzales.

The following were developed by Farm Laryn (PO Mouton & Sons), Citrusdal, Cape Province, South Africa; T.F.S. Malherbe, Farm Robyn, Cape Province, South Africa; G. Joubert, Farm Robyn, Cape Province, South Africa. Donated by Citrus Exchange, Pretoria, Transvaal, South Africa. Received 01/2001.

PI 654851. Citrus sinensis (L.) Osbeck

Cultivar. "ROBYN"; 26/RN/20/C38; IPPN 101; VI 579; RCRC 4063. Pedigree - Navel selection (see Source history). This was a contract cleanup for H Brokaw; should be OK to distribute as per J Bash. Color development 3 - 5 weeks later than 'Washington with variable fruit quality (information from Outspan, South Africa, 1995). (RRK, 08/2006).

The following were donated by Wayne Bourgeois, Louisiana State University Citrus Research Station, 22193 Highway 23, Port Sulphur, Louisiana 70083, United States; Albert Newcomb, Thermal Plaza Nursery, 68035 P Highway 86, Thermal, California 92274, United States. Received 01/2001.

PI 654852. Citrus unshiu Marcow.

Cultivar. "ARMSTRONG"; IPPN 103; VI 580; RCRC 4064. Pedigree - Unknown.

The following were donated by John Moll, Nkwalini, Natal, South Africa. Received 01/2001.

PI 654853. Citrus sinensis (L.) Osbeck

Cultivar. "CERIDWEN"; IPPN 118; VI 581; RCRC 4065. Pedigree - Unknown, presumably a budline of 'Washington' navel. Contract cleanup for H Brokaw, but should be available for distribution as per J Bash. (RRK, 08/2006).

The following were developed by H Aoshima, Fukudaga Valley, Shizuoka, Japan. Donated by Andrew Harty, Kerifresh Ltd., Waipapa Road, RD 2, Kerikeri, New Zealand. Received 01/2001.

PI 654854. Citrus unshiu Marcow.

Cultivar. "AOSHIMA"; IPPN 144; VI 584; RCRC 4066. Pedigree - 'Aoshima' is an 'Owari' mutant.. 'Aoshima' is a late maturing satsuma (mid-December to early January) that stores well. It has replaced 'Ishikawa' as the leading variety of of late maturing satsuma in Japan. 'Aoshima' is grown mainly in its native Shizuoka Prefecture on about 6000 ha. The trees are vigorous, densely foliated, precocious, and are reliable bearers. The fruit is larger than most other satsumas and has an attractive oblate shape. The rind is smooth and tightly adhering but easy to peel. Flavor is superior with both high sugar and high acid levels. (summarized from J Saunt, Citrus Varieties of the World, 2000) (RRK, 08/2006).

The following were donated by Andrew Harty, Kerifresh Ltd., Waipapa Road, RD 2, Kerikeri, New Zealand. Received 01/2001.

PI 654855. Citrus limon (L.) Burm. f.

Cultivar. "YEN BEN"; IPPN 145; VI 585; RCRC 4067. Developed in Australia. Pedigree - A 'Lisbon' lemon sport. 'Yen Ben' attracted the interest of New Zealand researchers in the mid-1970's, due to its success as a Lisbon-type lemon for areas with marginal heat accumulation. Subsequently a large number of trees have been propagated by New Zealand nurserymen, and it has become the preferred 'Lisbon' selection in New Zealand. That country has developed a market in Japan. 'Yen Ben' is said to produce precocious trees. Yields are said to be 'heavy', however individual fruit sizes are often small due to excessive set. The fruit have smooth rinds, high juice %, and are low seeded. (Information summarized from the donor and from Saunt, 'Citrus Varieties of the World', 2000) (RRK, 08/2006).

The following were donated by Tom Spellman, La Verne Nursery, La Verne, California, United States. Received 01/2001.

PI 654856. Citrus limon (L.) Burm. f.

Cultivar. "POMONA"; IPPN 156; VI 588; RCRC 4068. Pedigree - Unknown (see Source history). Description from donor: Vigorous tree; similar to Eureka lemon; fruit rounded with a small nipple; smaller than normal Eureka; good fruit quality with flavor that is sweet and low in acid; juicy; easy to peel; few to no seeds when grown in isolation; not excessively thorny; very hardy (survived 1990 freeze of several hours at 16 degrees). (RRK, 08/2006).

The following were developed by H. C. Barrett, 6352 Forecastle Court, Orlando, Florida 32807-5927, United States. Donated by Michael Kesinger, Bureau of Citrus Budwood Registration, Division Of Plant Industry, 3027 Lake Alfred Road, Winter Haven, Florida 33881-1499, United States. Received 02/2000.

PI 654857. Citrus limon (L.) Burm. f.

Cultivar. "GIANT KEY LIME"; ARB 11-100; DPI 839; IPPN 167; VI 590; RCRC 4069. Pedigree - Spontaneous autotetraploid selected from seedling population of diploid Key lime. This is said to have wood pocket, a genetic disorder. Fruit are more than twice as large as ordinary diploid key lime but have true Key lime flavor and aroma. Suggested as containerized ornamental by developer. (summarized from release notes) (RRK, 08/2006).

The following were donated by Leo Nordman, Nordman Ornamental Nursery, De Land, Florida, United States. Received 10/1999.

PI 654858. Fortunella margarita (Lour.) Swingle

Cultivar. "NORDMAN SEEDLESS NAGAMI"; "NORDMAN GIANT SEEDLESS NAGAMI"; IPPN 171; VI 592; RCRC 4070. Pedigree - Unknown.

The following were donated by Andrew Harty, Kerifresh Ltd., Waipapa Road, RD 2, Kerikeri, New Zealand. Received 02/1999.

PI 654859. Citrus unshiu Marcow.

Cultivar. "SHIROKOLISTVENNYI"; IPPN 192; VI 602; RCRC 4071. Developed in Russian Federation. Pedigree - Unknown.

The following were developed by W.T. Swingle, USDA - Bureau of Plant Industry, Washington, District of Columbia, United States. Donated by Andrew Harty, Kerifresh Ltd., Waipapa Road, RD 2, Kerikeri, New Zealand. Received 02/1999.

PI 654860. Citrus unshiu Marcow.

Cultivar. "SILVERHILL"; IPPN 194; VI 603; RCRC 4072. Pedigree - 'Silverhill' is a nucellar seedling selection of 'Owari' from a cross made by WT Swingle. This accession is said to be nearly identical to 'Frost Owari' (PI 539689/RCRC 3178) (RRK, 08/2006).

The following were donated by Kim Wilenius, C & M Nursery, PO Box 383, Nipomo, California 93444, United States. Received 02/1999.

PI 654861. Citrus x tangelo J. W. Ingram & H. E. Moore
Cultivar. "SANTA BARBARA"; IPPN 188; VI 611; RCRC 4073. Pedigree -
Unknown. Medium sized fruit (2.5 inches in diameter) yellow with reddish
pigmentation in oil glands. Grapefruit flavor-few seeds-juicy-slight
nipple. Pink interior around rind with large grapefruit type
segments.(JA Bash, 10/1995) (RRK, 08/2006).

The following were developed by Tyozaburo Tanaka, Kyushu Imperial University,
Hakozki, Fukuoka, Japan. Donated by Andrew Harty, Kerifresh Ltd., Waipapa
Road, RD 2, Kerikeri, New Zealand. Received 02/1999.

PI 654862. Citrus unshiu Marcow.
Cultivar. "MIYAGAWA"; "MIYAGAWA WASE"; IPPN 195; VI 612; RCRC 4074.
Pedigree - Originated as a limb sport in a 'Zairai' tree. "Fruit large
(for satsuma), moderately oblate, with thin and smooth rind. Seedless.
Juice abundant, sugars and acid well-blended, and quality excellent.
Matures very early and stores well for Wase Unshiu. Tree more vigorous
than most old Wase clones and productive....It is currently the best
known and much the most extensively grown of the Wase varieties." (The
Citrus Industry, 1967, Vol 1, p 503). "Still Japan's most extensively
grown variety on an estimated 12,000 ha....The tree lacks vigour
compared with other Wase varieties such as its daughter varieties 'Miho'
and 'Okitsu'.... 'Miyagawa' matures slightly earlier than 'Miho' and
three to four weeks ahead of 'Owari'. THE fruit is larger than 'Owari',
with a smoother rind texture but it is thicker than other Wase
varieties. The flavour is quite sharp because of the moderately high
acid level coupled with sugar levels that are not particularly
high....In trials in South Africa, 'Miyagawa' is regarded as a promising
variety but it is less suitable for New Zealand exports compared with
'Miho'." (Saunt, Citrus Varieties of the World, 2000, p 48) "'Miyagawa'
is an early maturing satsuma that has been grown in New Zealand for many
years and was the basis of its satsuma industry. It is still a popular
variety, but is considered by some to be too difficult to manage and is
being superseded slowly by newer varieties. 'Miho' and 'Okitsu' are
easier to manage (less flowers are formed and therefore less fruit
thinning is required and they mature earlier or achieve higher sugar
contents.)" (notes from the donor, circa 1995) In a trial in California
conducted by Thomas Chao, UC Riverside, 'Miyagawa' (along with 'Xie
Shan') developed brix earlier in the season. Projected harvest in the
San Joaquin Valley was as early as mid-September. 'Miyagawa' had a sharp
flavor due to moderately high acid coupled with moderate sugar levels.
Internal color was better than the other selections tested.
Additionally, it was seedless and peeled.

The following were developed by Rene Ristorelli, Domaines Royaux, Saida,
Rabat-Sale, Morocco. Donated by Andrew Harty, Kerifresh Ltd., Waipapa Road,
RD 2, Kerikeri, New Zealand; R. Vogel, Station de Recherches Agronomiques de
Corse, INRA, San Giuliano 20230, San Nicolao, Corsica, France. Received
02/1999.

PI 654863. Citrus clementina hort. ex Tanaka
Cultivar. "CORSICA #2"; SRA 371; VI 613; IPPN 197; RCRC 4075. Pedigree -
SRA 371 ('Corsica #2') is a selection of 'Fina' (see Source History). The
SRA selections originated in the 1960's as selections of Moroccan

Clementines made at the Station de Recherches Agrumicoles, San Giuliano, Corsica. This program had the aim of developing a clementine industry in Corsica. Not much is known about this particular selection as it was not one of the most important. (RRK, 08/2006).

The following were developed by INRA Station de Recherche Agronomique, San Giuliano 20230, San Nicolao, Corsica, France; Station Experimentale Agronomique de Boufarik, Mitidja, Boufarik, Blida, Algeria. Donated by Andrew Harty, Kerifresh Ltd., Waipapa Road, RD 2, Kerikeri, New Zealand. Received 02/1999.

PI 654864. *Citrus clementina* hort. ex Tanaka

Cultivar. "SRA 63 CLEMENTINE"; SRA 63; VI 614; IPPN 198; RCRC 4076. Pedigree - A selection of 'Comune' ('Algerian'). This variety was developed in the 1960s at the INRA Station de Recherche Agronomique at San Giuliano. SRA 63 was the selection that was most suited to Corsican conditions and became the basis of the small but successful Corsican clementine industry. Fruit on all SRA selections tends to be small and therefore they have not become important outside Corsica. However, there is a small amount of SRA 63 planted in South Africa which is being replaced by larger fruited varieties. (Information summarized from Saunt, *Citrus Varieties of the World*, 2000, p 59) Note: This accession was received first as budwood and later as the original VI trees from CCPP. (RRK, 08/2006).

The following were donated by Andrew Harty, Kerifresh Ltd., Waipapa Road, RD 2, Kerikeri, New Zealand. Received 02/1999.

PI 654865. *Citrus sinensis* (L.) Osbeck

Cultivar. "VALENCIA LATE"; VI 615; IPPN 201; RCRC 4077. Pedigree - Unknown, presumably a selection of 'Valencia'.

The following were donated by Tom Spellman, La Verne Nursery, La Verne, California, United States. Received 02/1999.

PI 654866. *Citrus limon* (L.) Burm. f.

Cultivar. "LA VERNE SWEET EUREKA"; IPPN 209; VI 617; RCRC 4078. Pedigree - Unknown. This supposed sweet lemon, when sampled, proved not to be sweet at all. Therefore, it was de-accessioned 11/2004. Later communication from Tom Spellman indicated that this was not actually a sweet lemon, but rather a lemon that was slightly sweeter than a regular lemon. (RRK, 08/2006).

The following were donated by Crop Plant Breeding-USDA; USDA-ARS US Horticultural Research Laboratory, 2001 S Rock Rd, Fort Pierce, Florida 34945, United States; USDA-ARS US Horticultural Research Laboratory, 2001 S Rock Rd, Fort Pierce, Florida 34945, United States; Kim Bowman, USDA-ARS USHRL, 2001 South Rock Rd, Ft. Pierce, Florida 34945, United States. Received 06/01/1996.

PI 654867. *Citrus aurantium* L.

Cultivar. "MILDURA"; "SMOOTH FLAT SEVILLE"; "SMOOTH SEVILLE"; "APPLEBY"; CPB-10626-B; HF-2-2-14; AF-62-20; VI 618; IPPN 221; RCRC 4079. Developed

in Australia. Pedigree - "This is an old Australia fruit that is thought to have originated as a seedling of un-known parentage and has generally been regarded as a sweet orange and grapefruit hybrid. Its age and numerous resemblances to Poorman, however, suggest that it may be of similar origin and possibly a sister seedling." (Source: The Citrus Industry, Vol I, p.551). "Fruit similar to Poorman in size, form, and flavor, but rind surface very smooth; both rind and flesh color reddish-orange; seeds exhibit low polyembryony (usually one, occasionally two embryos). Tree and foliage similar to Poorman, but tree commonly more vigorous and larger. Younger branches also exhibit dark bark streaks characteristic of Poorman. Distinctive rough bark condition on trunk and main branches which affects some Poorman selections not observed so far on Smooth Seville trees...Like Poorman, Smooth Seville has a lower heat requirement for maturity than the grapefruit and hence ripens earlier and serves as a satisfactory substitute." (Source: The Citrus Industry vol. I, p 551.) As a rootstock, it is said to have properties similar to sour orange but with improved resistance to CTV. It has some use as a rootstock in Florida but is untried in California. A defect for rootstock use is the low level of nucellar embryony (60% or less). Note: Source history as shown is most probable; however, there is a slight possibility that this was re-introduced as seed from Australia in 1963 (Accession identifier IF-63-26) (RRK, 08/2006).

The following were donated by Andrew Harty, Kerifresh Ltd., Waipapa Road, RD 2, Kerikeri, New Zealand. Received 02/1999.

PI 654868. *Citrus sinensis* (L.) Osbeck

Cultivar. "HAWARD LATE VALENCIA (WILSON'S)"; IPPN 202; VI 620; RCRC 4080. Pedigree - Haward Late Valencia' originated at Tauranga and probably represents a clonal budline of nucellar origin. This is a budline selection of Harward Late made by John Wilson, Keri Keri. Fruit is said to be indistinguishable from Valencia and overall performance is superior in NZ. According to A Harty: Fruit mature from November to February; tree is moderately vigorous with rounded bushy habit and a consistently high yield; fruit medium to large, globose to oblique in shape; the rind thick (7-8mm); moderately easy to peel and segment; flesh orange when mature, moderately sweet and juicy, and moderately seedy (up to 6 seeds per fruit); a good quality late maturing Valencia orange.

The following were donated by Jun-Qi Zhang, Institute of Subtropical Crops, Jheijiang Academy, China. Received 02/1999.

PI 654869. *Citrus unshiu* Marcow.

Cultivar. "XIE SHAN"; IPPN 121; VI 621; RCRC 4081. Pedigree - Unknown. According to Fred Gmitter, University of Florida (personal communication ca 2004), 'Xie Shan' is "Extremely early ripening in comparison to other Chinese satsumas." In a California trial, Thomas Chao, UC Riverside, reported tha 'Xie Han' developed high brix levels somewhat earlier than the other early cv tested ('Armstrong', 'Miyagawa', and 'Chinese S-9'). However, high acid levels kept the sugar/acid ratio within about the same range as the other cv. 'Xie Shan' and 'Miyagawa' were considered the earliest cv in this trial. Additionally, it is reported that 'Xie Shan' was completely seedless. easy peeling, and had a unique taste and flavor. Projected harvest in the San Joaquin Valley was mid-September.

(Information from Topics in Subtropics, 2005, 3(2): 3-5). Thomas Chao, in the cited publication, states that 'Xie Shan' is a Chinese translation of a Japanese cv called 'Wakayama'. However, references to a cv 'Wakayama' are not at hand. Wakayama is a principal Japanese satsuma growing area. Additionally, Xie Shan is a geographic name in China. Caveat citriculturist. (RRK, 08/2006).

The following were developed by H. C. Barrett, 6352 Forecastle Court, Orlando, Florida 32807-5927, United States. Donated by USDA-ARS US Horticultural Research Laboratory, 2001 S Rock Rd, Fort Pierce, Florida 34945, United States. Received 11/2001.

PI 654870. Fortunella margarita (Lour.) Swingle

Cultivar. "CENTENNIAL VARIEGATED"; USDA 93-7; IPPN 141; VI 594; RCRC 4082. Pedigree - 'Centennial' resulted from a spontaneous variegated mutation observed (by HC Barrett) in 1986 on a small twig of US 1515, an un-named breeding selection. US 1515 originated from open-pollinated seed of 'Nagami' kumquat planted at the AH Whitmore Foundation Farm, Leesburg, FL in 1975. It was propagated onto trifoliolate and maintained in greenhouses of the US Horticultural Research Laboratory in Orlando. 'Centennial' was named in recognition of the 100th anniversary of the USHRL. When grown in containers on trifoliolate, 'Centennial' is a small, shrubby tree with dense, thornless, short-internoded branches. Leaves are elongate-ovate with a generally tri-colored variegation. Fruit are also variegated but in a different pattern, apparently with characteristics similar to 'Nagami' in other regards. It is possibly suitable for marmalade. Suggested use of 'Centennial' is as an ornamental. (summarized from Release Notice dated 07/22/1993 and from published release notice in HortSci, 28:236, 1993).

Unknown source. Received 07/2001.

PI 654871. Citrus sinensis (L.) Osbeck

Cultivar. "WIFFEN SUMMER"; IPPN 207; VI 616; RCRC 4083. Developed in Australia. Pedigree - A late navel selection first identified by Ivan Wiffen on his property near Nanglioc, Victoria, Australia in the early 1980's. F Arthur Edwards, Yandilla Park Services, Chowilla St, Renmark 5341, South Australia; contract cleanup for M Britz; licensed to Brokaw Nursery; for planting in Variety Collection only; propagative material not available. It is said to mature at about the same time as and to hang on the tree as well as 'Lane Late', but to have more solids and juice content and lower granulation late in the season. (RRK, 08/2006).

Unknown source. Received 1999.

PI 654872. Citrus sinensis (L.) Osbeck

Cultivar. "ROHDE"; IPPN 117; VI 565; RCRC 4084. Developed in Australia. Pedigree - Unknown. This is a late navel. For CVC only, not for distribution (patented; licensed to Brokaw Nursery).

The following were donated by Ottillia Bier, University of California, Botany and Plant Sciences, Riverside, California 92521, United States; Tracy Kahn, University of California, Department of Botany, & Plant Sciences, Riverside,

California 92521, United States; David Karp, 9050 Lloyd Place, Los Angeles, California 90069, United States; James Patterson, Patterson Ranch, Redlands, California, United States. Received 04/01/2000.

PI 654873. *Citrus sinensis* (L.) Osbeck

Cultivar. "MALTAISE SEMI-SANGUINE"; "MALTA"; "MALTAISE SANGUINE"; "PORTUGAISE"; "MALTAISE DE TUNISIE"; RCRC 4085; RQ-2001-66. Developed in Malta. "Portugaise is the name employed in Algeria where this variety is commercially most important, but in Tunisia it is the old and highly reputed Maltaise Sanguine variety. Almost certainly a number of clones are involved which are indistinguishable in general, yet exhibit minor differences in growth habit and fruit form. In Tunisian usage, Portugaise is considered to be somewhat more upright in growth habit and with fruit of a slightly more pronounced oval form. There is a close resemblance between Maltaise Sanguine and the Sanguinella Moscata variety of Italy. There is general agreement as to the excellent eating quality and fragrance of this variety. However, it is highly variable and uncertain with respect to blood coloration development. Frequently external red pigmentation is not accompanied by internal coloration and in some growing areas both are lacking. The origin of this undoubtedly very old variety is unknown, but possibly it may have been the island of Malta. The Maltese Blood variety introduced into Florida from the Mediterranean many years ago seems likely to be a clone of this variety as does the Bloodred Malta of West Pakistan and Punjab, India. The Egyptian variety Beladi Blood, which is said to have been imported from Malta about 1830, almost certainly is Maltaise Sanguine." (Hodgson, 1967) "An important, high quality semi-blood variety, the Maltaise Sanguine is of unknown origin, but Malta is most probable. It is grown extensively in Tunisian and to a lesser extent in Morocco. The tree is moderately vigorous but attains only medium size when mature and is of only average productivity with a tendency towards alternate bearing. Fruit is of medium size, slightly oval in shape, with a finely pebbled rind texture. External colour is predominantly orange but occasionally has the slightest of blushes. The rind often feels soft, is of medium thickness and is easily peeled. The flesh is well coloured but never more than moderately pigmented and often only.

The following were donated by Ahmet Cinar, University of Cukurova, Subtropical Fruit Research and Experimental Centre, Adana, Turkey; Nurat Onelge, University of Cukurova, Adana, Turkey. Received 05/01/2001.

PI 654874. *Citrus sinensis* (L.) Osbeck

Cultivar. "Cukurova early navel"; IPPN 172; VI 638; RCRC 4086. Pedigree - Unknown. Probable budsport. A standard navel cultivar in Turkey.

The following were donated by Ottillia Bier, University of California, Botany and Plant Sciences, Riverside, California 92521, United States. Received 05/01/2001.

PI 654875. *Citrus sinensis* (L.) Osbeck

Cultivar. "UCR early navel"; IPPN 173; VI 639; RCRC 4087. Pedigree - Supposedly early-maturing budsport of a 'Washington' navel tree on the UC Riverside Citrus Experiment Station collected by Ottillia 'Toots' Bier circa November 1994 (location not remembered). See Pedigree information. Taken from O Bier and renamed 'Corbett's Early' by C

Corbett; sent to CCPP by ML Arpaia; renamed by DJ Gumpf. Tree planted in field 12D for observation has been consistently slightly later than other 'Washington' navels at UCR. CCPP indicates that at Lindcove Field Station, it is in fact early. (RRK, 08/2006).

The following were collected by H Huang, Auburn University, Auburn, Alabama, United States. Donated by William A. Dozier, Auburn University, Department of Horticulture, 101 Funchess Hall, Auburn, Alabama 36849, United States; David J. Gumpf, University of California, Department of Plant Pathology, Riverside, California 92521, United States. Received 05/01/2001.

PI 654876. Citrus unshiu Marcow.

Cultivar. HU 6; "CHINA SATSUMA S-6"; VI 640; IPPN 177; RCRC 4088. Collected 08/1995 in Hubei, China. Pedigree - Unknown. Probable budsport, as satsumas are generally seedless. Tree vigor and fruit quality rated "acceptable" and cold hardiness rated "very good" by the collector. (RRK, 08/2006).

PI 654877. Citrus unshiu Marcow.

Cultivar. HU 7; "CHINA SATSUMA S-7"; VI 641; IPPN 178; RCRC 4089. Collected 08/1995 in Hubei, China. Pedigree - Unknown. Probable budsport, as satsumas are generally seedless. The collector rated this selection "acceptable" for tree vigor and fruit quality and "very good" for cold hardiness. (RRK, 08/2006).

The following were donated by Andrew Harty, Kerifresh Ltd., Waipapa Road, RD 2, Kerikeri, New Zealand. Received 05/01/2001.

PI 654878. Citrus unshiu Marcow.

Cultivar. "Aguzdera satsuma"; VI 642; IPPN 191; RCRC 4090. Developed in Georgia. Pedigree - According to A Harty, this variety was selected in the 1980's from the Black Sea coast of Georgia (former USSR) by Stuart Dawes of Hort+ (whose wife was Georgian). Little information other than origin data is available for this variety.

PI 654879. Citrus unshiu Marcow.

Cultivar. "Iveriya satsuma"; IPPN 193; VI 643; RCRC 4091. Developed in Georgia. Pedigree - According to A Harty, this variety was selected in the 1980's from the Black Sea coast of Georgia (former USSR) by Stuart Dawes of Hort+ (whose wife was Georgian). Little information other than origin data is available for this variety.

The following were donated by Robert C. Brokaw, Brokaw Nursery, Inc., P.O. Box 4818, Saticoy, California 93003, United States. Received 05/01/2001.

PI 654880. Citrus limon (L.) Burm. f.

Cultivar. "Atmore lemon"; IPPN 206; VI 644; RCRC 4092. Pedigree - According to L Rose of Brokaw Nursery (06/2003), this is a selection of 'Villafranca'.

The following were donated by Mikeal Roose, University of California, Dept. of Botany & Plant Sciences, 4135 Batchelor Hall, Riverside, California 92521, United States. Received 05/01/2001.

PI 654881. *Citrus sinensis* (L.) Osbeck

Cultivar. "Smith's red valencia"; IPPN 304; VI 647; RCRC 4093. Pedigree - Unknown. Apparent budsport. 'Smith's red valencia' is a pigmented sport of a conventional Valencia orange tree. The mother tree was growing in the Smith home garden in Ventura County, and a branch was observed to be producing fruit with a pronounced red rind blush and strong red internal color. Seeds were saved from a fruit sample brought to the local farm advisor (N Sakovich), and the most promising seedling was selected for release. The tree is a vigorous grower and carries good crops of fruit. The fruit is of good size and flavor and is very low-seeded. As noted above, the rind frequently carries a heavy red blush and the flesh is heavily pigmented by anthocyanin. The fruit shape is somewhat variable at present, globose to ovoid with a depressed base, possibly due to the juvenility of the subject trees. Although the fruit is mature in late winter, it holds well on the tree into late spring, well past the season for conventional blood oranges.

The following were donated by Robert C. Brokaw, Brokaw Nursery, Inc., P.O. Box 4818, Saticoy, California 93003, United States. Received 05/01/2001.

PI 654882. *Citrus limon* (L.) Burm. f.

Cultivar. "Old line Eureka lemon"; VI 649; IPPN 205; RCRC 4094. Pedigree - According to L Rose of Brokaw Nursery, this is an OL 'Allen' eureka (06/2003).

The following were donated by Government Fruit Experiment Station - Shillong, Shillong, Meghalaya, India; Andrew W. Scott, Rio Farms Inc., Rt. 1, Box 326, Monte Alto, Texas 78538, United States. Received 05/01/2001.

PI 654883. *Citrus reticulata* Blanco

Cultivar. "Soh himtra"; T58-9; VI 651; IPPN 280; RCRC 4095. Pedigree - Unknown. This may be PI 254779, 'Soh niamtra' (rec'd as seed, January 1959 at USDA-PIO). Another Rio Farms accession, 'Soh siem' (T59-7), is also one listed as being received (as PI 254732) at the same time and from the same source. Both varieties were received at that time at the US Date & Citrus Station, Indio, so it is logical that they were also sent to USDA Weslaco. (RRK, 08/2006).

The following were donated by Andrew W. Scott, Rio Farms Inc., Rt. 1, Box 326, Monte Alto, Texas 78538, United States. Received 05/01/2001.

PI 654884. *Citrus* hybrid

Rootstock. "Fraser seville sour orange"; T63-9; VI 652; IPPN 286; RCRC 4096. Pedigree - Unknown. Possibly the same as 'Smooth Flat Seville' (RCRC 4079), which was received by USDA Orlando as seed from Australia in 1963 with accession number IF-63-26. Indio accession C-64-341 is listed as 'ops, Seville sour orange, Orlando, IF-63-26, sent by Lillian Fraser, Smooth Flat Seville sour ex tree 1 Appleby'. This may be a distinct selection of the Smooth Flat Seville types... 'best selection of Smooth Flat Seville' (HK Wutscher, 1997). See comments under RCRC 4079 regarding reported rootstock characteristics. (RRK, 08/2006).

The following were donated by Andrew W. Scott, Rio Farms Inc., Rt. 1, Box 326, Monte Alto, Texas 78538, United States; Alfred Loeblich, Dept of Biology and Biochemistry, University of Houston, 316 Science Building, University of Houston, Houston, Texas 77204, United States. Received 01/01/1994.

PI 654885. X Citrofortunella sp.

Cultivar. "RIO GRANDE VALLEY LEMONQUAT"; RCRC 4097; RSD1994003. Developed in United States. Pedigree - This is supposed to be a hybrid of *C. limon* x *Fortunella sp*. See narrative for more information. Current accession derived from open pollinated seed. The original seedlot produced 5 apparently identical santed in field 12D for observation in 1998. The seedling at 12D-23-02 (=NCGRNO 3369=C1994-03-05) was selected in as being consistent with the description by Ottilia 'Toots' Bier and Robert Krueger and was retained as CRC 4097 in 2002. "Lemonquat is a chance hybrid found by Leslie Cude at Beeville, Texas. One tree budded on sour orange in 1942 was 8 feet tall with a 7-foot spread at 10 years of age. It is fairly open with flowering habits like the kumquat. Fruits are round to pyriform, ranging from 1 1/2 to 3 inches in diameter, and orange yellow when ripe. The interior of the fruit is lemon-like, has a pleasant acidity, and becomes sweeter in March and April. It is highly cold-resistant, and the remarkably uniform seedlings develop rapidly. Swingle considered this variety as a probable hybrid of Meyer lemon and kumquat." (Mortensen, 1954) "'Lemonquat' (TR 26) is a chance hybrid found at Beeville and tested at Crystal City, Texas...The 'lemonquat' has value for bud culture in areas where standard lemons are injured by cold, since it has acid fruit, is cold-hardy, and blooms several times a year. It can be propagated as cuttings." (Olson and Sleeth, 1965) "The fruit of this Lemonquat are very similar se of Sunquat which suggests to us that this is another mandaquat (perhaps it has Clementine or Dancy tangerine as a parent). Circa 1981, Chapman suggested such a possibility and Mortensen agreed that the Rio Grande Valley Lemmonquat could also be a mandaquat." (Loeblich and Walden, 1993) At the time of donation, Dr Loeblich reiterated his belief that this accession is probably a "mandaquat". Olson and Sleeth (1965) recommend as a rootstock 'Cleopatra' mandarin or calamondin. (RRK, 08/2.

The following were donated by Kim Bowman, USDA, ARS, Horticultural Research Laboratory, A.H. Whitmore Foundation Farm, Groveland, Florida 34736, United States; David J. Gumpf, University of California, Department of Plant Pathology, Riverside, California 92521, United States; Raul Gonzales, UC Lindcove Ressearch and Extension Center, 22963 Carson Ave, Exeter, California 93221, United States; Paul McEwen, McEwen Nursery, Road 212, Exeter, California 93221, United States. Received 08/1993.

PI 654886. Citrus unshiu Marcow.

Cultivar. "MCEWEN"; VI 549; IPPN 114; RCRC 4098; C-1993-01. Pedigree - Bud selection of 'Owari'. In the early 1990s, 6 budlines of 'Owari' satsumas (RCRC 4098, PI 600668/RCRC 4099, RCRC 4100, PI 600669/RCRC 4101, RCRC 4102, RCRC 4103) were collected from Tulare County, California in the hope of finding a superior-performing selection for San Joaquin Valley conditions. However, interest in these quickly waned and they are not currently maintained by CCPP as commercial bud sources. It is not known at this time how they are supposed to differ or be superior to the standard selection of 'Owari' ('Frost Owari', PI 539689/RCRC 3178). (RRK, 08/2007).

The following were donated by Kim Bowman, USDA, ARS, Horticultural Research Laboratory, A.H. Whitmore Foundation Farm, Groveland, Florida 34736, United States; David J. Gumpf, University of California, Department of Plant Pathology, Riverside, California 92521, United States; Raul Gonzales, UC Lindcove Research and Extension Center, 22963 Carson Ave, Exeter, California 93221, United States; Daniel Lange, Lange Ranch, Woodlake, California 93286, United States. Received 10/1993.

PI 654887. Citrus unshiu Marcow.

Cultivar. "DART I (NORTH)"; IPPN 112; VI 557; RCRC 4100; C-1993-06. Pedigree - Bud selection of 'Owari'. In the early 1990s, 6 budlines of 'Owari' satsumas (RCRC 4098, PI 600668/RCRC 4099, RCRC 4100, PI 600669/RCRC 4101, RCRC 4102, RCRC 4103) were collected from Tulare County, California in the hope of finding a superior-performing selection for San Joaquin Valley conditions. However, interest in these quickly waned and they are not currently maintained by CCPP as commercial bud sources. It is not known at this time how they are supposed to differ or be superior to the standard selection of 'Owari' ('Frost Owari', PI 539689/RCRC 3178). (RRK, 08/2007).

PI 654888. Citrus unshiu Marcow.

Cultivar. "ROAD 164"; IPPN 115; RRUT 18; RCRC 4102; C-1993-03. Pedigree - Bud selection of 'Owari'. In the early 1990s, 6 budlines of 'Owari' satsumas (RCRC 4098, PI 600668/RCRC 4099, RCRC 4100, PI 600669/RCRC 4101, RCRC 4102, RCRC 4103) were collected from Tulare County, California in the hope of finding a superior-performing selection for San Joaquin Valley conditions. However, interest in these quickly waned and they are not currently maintained by CCPP as commercial bud sources. It is not known at this time how they are supposed to differ or be superior to the standard selection of 'Owari' ('Frost Owari', PI 539689/RCRC 3178). (RRK, 08/2007).

PI 654889. Citrus unshiu Marcow.

Cultivar. "LANGE #3"; IPPN 110; RCRC 4103; C-1993-04. Pedigree - Bud selection of 'Owari'. In the early 1990s, 6 budlines of 'Owari' satsumas (RCRC 4098, PI 600668/RCRC 4099, RCRC 4100, PI 600669/RCRC 4101, RCRC 4102, RCRC 4103) were collected from Tulare County, California in the hope of finding a superior-performing selection for San Joaquin Valley conditions. However, interest in these quickly waned and they are not currently maintained by CCPP as commercial bud sources. It is not known at this time how they are supposed to differ or be superior to the standard selection of 'Owari' ('Frost Owari', PI 539689/RCRC 3178). (RRK, 08/2007).

The following were developed by Christopher J. Corbett, USDA, ARS, National Germplasm Repository, 1060 Martin Luther King, Jr. Blvd., Riverside, California 92507, United States. Received 12/01/1993.

PI 654890. Citrus aurantium L.

Cultivar. "Broadleaf Chinotto"; RCRC 4104; C1993-10. Pedigree - Budsport of standard 'Chinotto' (PI 539167/RCRC 3728). This accession has shortened internodes and broader leaves than the standard 'Chinotto'. As with the standard 'Chinotto', it is of interest mainly as an ornamental type. (RRK, 01/2007).

The following were donated by Joe Furr, USDCS, Indio, California, United States. Received 06/1970.

PI 654891. *Eremocitrus glauca* (Lindl.) Swingle
Uncertain. RCRC 4105; *Eremocitrus glauca* hybrid. Pedigree - Open-pollinated seedling of seed received from US Date & Citrus Station. See Narrative. This accession is an OPS and an apparent hybrid of *Eremocitrus glauca*. It is morphologically different than *E glauca* (PI 539747/RCRC 3463). (RRK, 08/2006).

The following were developed by University of California, Department of Botany and Plant Sciences, Riverside, California 92521, United States. Received 1967.

PI 654892. *Microcitrus australis* (A. Cunn. ex Mudie) Swingle
Wild. "Australian finger lime"; "Australian round lime"; "Chinese box orange"; RCRC 4106. Pedigree - Presumably open-pollinated seed. Source of seed not known but apparently located in GH III at the UC Citrus Research Center, Riverside. There is not much known about this accession. The propagation source and history are not known. (RRK, 08/2006).

PI 654893. *Severinia buxifolia* (Poir.) Ten.
Wild. RCRC 4107. Pedigree - Presumably open-pollinated seed. Source of seed not known but apparently located in GH III at the UC Citrus Research Center, Riverside. There is not much known about this accession. The propagation source and history are not known. (RRK, 08/2006).

Unknown source. Received 1989.

PI 654894. *Microcitrus australasica* (F. Muell.) Swingle
Wild. RCRC 4108. Pedigree - Presumably open-pollinated seed, either from NCGRCD or UCR holdings. There is not much known about this accession. The propagation source and history are not known. The received date reflects the date planted in the field, so actual receipt was probably earlier. (RRK, 08/2006).

Unknown source. Received 1970.

PI 654895. X *Coleara* sp.
Genetic. "Coleara F2"; RCRC 4109; (*Clymenia* X *Procimequat*) F2. Pedigree - Apparently second generation open-pollinated seedlings of PI 539848/RCRC 3917. PI 539848 is *Clymenia polyandra* x [(*Citrus aurantiifolia* 'Mexican' x *Fortunella japonica*) x *Fortunella hindsii*]. Note: Some documents state that this hybrid is *Clymenia* X *Citrus*, but the referenced hybrid seems to be the best supported. "This hybrid was produced by Don Cole about 1966." -- EMN 1986. Therefore, the apparent F2 were probably produced in the early 1970s through the early 1980s. See additional comments under Narrative. The identity of this accession is not 100 % certain. There is some suggestion that the trees associated with PI 539848/RCRC 3917 are actually identical to RCRC 4109. See

comments under PI 539848/RCRC3917. One confounding factor is the fact that, although documentation on file from Bob Soost states that these were seedlings of PI 539848/RCRC 3017 maintained in the greenhouses at South Coast Field Station, the trees in the field (or at least some of them) are budded trees. They may have been produced from the seedling trees before being planted in the field. The identity as given here is the most probable based upon existing documentation. Note: Date of receipt is also uncertain, see Pedigree information. (RRK, 08/2006).

Unknown source. Received 1993.

PI 654896. *Severinia buxifolia* (Poir.) Ten.

Wild. RCRC 4110. Pedigree - Presumably open-pollinated seed, either from NCGRCD or UCR holdings. There is not much known about this accession. The propagation source and history are not known. The received date reflects the date planted in the field, so actual receipt was probably earlier. (RRK, 08/2006).

The following were donated by Tom Delfino, 359 Birchwood Ave, Moraga, California 94556, United States. Received 05/01/2002.

PI 654897. *Citrus sinensis* (L.) Osbeck

Cultivar. "Delfino Blood orange"; IPPN 159; VI 653; RCRC 4114. Pedigree - Unknown. The donor states that this is possibly a seedling dating from prior to the 1930's. According to the donor, the fruit matures in late summer in Soledad, is nearly spherical, the flesh is lightly colored with anthocyanins, and has some seeds. (RRK, 08/2006).

The following were collected by H Huang, Auburn University, Auburn, Alabama, United States. Donated by William A. Dozier, Auburn University, Department of Horticulture, 101 Funchess Hall, Auburn, Alabama 36849, United States; David J. Gumpf, University of California, Department of Plant Pathology, Riverside, California 92521, United States. Received 05/01/2002.

PI 654898. *Citrus unshiu* Marcow.

Cultivar. HU 5; "CHINA SATSUMA S-3"; IPPN 175; VI 654; RCRC 4115. Developed in Japan. Collected 08/1995 in Hubei, China. Pedigree - Unknown. Probable budsport, as satsumas are generally seedless. This line was has a name, which could not be translated into English by the collector (letter from WA Dozier, Chair, Auburn Univ Dept of Horticulture, to DJ Gumpf, 08-28-1995). Collector rated tree vigor and fruit quality as "good" and cold hardiness as "very good". (RRK, 08/2006).

The following were donated by Kim Wilenius, C & M Nursery, PO Box 383, Nipomo, California 93444, United States. Received 05/01/2002.

PI 654899. *Citrus limettioides* Tanaka

Cultivar. "C&M sweet lime"; IPPN 187; VI 655; RCRC 4116. Pedigree - Unknown.

The following were donated by Andrew Harty, Kerifresh Ltd., Waipapa Road, RD 2, Kerikeri, New Zealand. Received 05/01/2002.

PI 654900. *Citrus reticulata* Blanco

Cultivar. "Richards Special (New Zealand)"; IPPN 190; VI 656; RCRC 4117. Pedigree - Unknown. Origin of 'Richard's Special' in Australia was apparently as a seedling selection. It is not known whether this accession differs from PI 539506/RCRC 3329. This selection is said to do well in cool northern New Zealand. (RR Krueger, 08/2006).

The following were donated by Hong-Ji Su, National Taiwan University, Department of Plant Pathology and Entomology, Taipei, Taiwan. Received 05/01/2002.

PI 654901. *Citrus reticulata* Blanco

Cultivar. "Iyo San Ponkan"; IPPN 213; VI 657; RCRC 4118. Pedigree - Unknown. Apparent budsport or selection of 'Ponkan'. This is apparently a selection of 'Ponkan' but details as to how it differs from other 'Ponkan' are not known at this time. This was originally supposed to be a proprietary introduction, but apparently the requestor decided that he did not want proprietary rights and it is freely available. (RRK, 08/2006).

The following were donated by John Pressler, 2PH Farms, Selma Road, Emerald, Queensland 4720, Australia; Pam Pressler, 2PH Farms, PO Box 1103, Emerald, Queensland 4720, Australia. Received 05/01/2002.

PI 654902. *Citrus reticulata* Blanco

Cultivar. "Selma"; VI 658; IPPN 220; RCRC 4119. Pedigree - Unknown. Little information other than origin data is available for this variety. Australian colleagues P Barkley & M Smith have not heard of it (2003). (RRK, 08/2006).

The following were collected by Raul Gonzales, UC Lindcove Research and Extension Center, 22963 Carson Ave, Exeter, California 93221, United States. Received 05/01/2002.

PI 654903. *Citrus aurantiifolia* (Christm.) Swingle

Cultivar. "Chulo mexican"; IPPN 225; VI 659; RCRC 4120. Collected 07/11/1996 in Mexico. Pedigree - Unknown. According to the collector, this is a 'really great' selection of Mexican lime. (RRK, 08/2006).

The following were donated by Luis Navarro, IVIA, Apartado Oficial 46071, Carretera de Moncada a Naquera km 4.5, Moncada, Valencia 46113, Spain; Institute Sperimentale Per, L'Agrumicoltura, Acireale, Sicily, Italy. Received 05/01/2002.

PI 654904. *Citrus limon* (L.) Burm. f.

Cultivar. "Limonero Messina"; IVIA-191; VI 661; IPPN 273; RCRC 4121. Pedigree - Unknown. See narrative. The varietal name is not in accordance with Italian lemon nomenclature, and this selection may be 'Femminello Messina' (name on Acireale list). 'The trees are described as vigorous and with few spines. The fruit is large and thick-skinned,

with little neck or apical nipple. Seed number is low (1-2). The pulp is very juicy and acidic. This variety reflowers, with the principal harvest being in summer. It is moderately productive and ships well. It has a certain amount of resistance to Mal secco. This variety appears to have limited production in Spain. See Levante Agricola, 25:94-96, June 1986 and Medina: El Cultivo Moderno del Naranja, Limonero y Otros Agrios (Barcelona, 1984). 'Messina: poor ever bearing and very early harvest variety (autumn). Vigorous tree with very little small thorns?very sensitive to Aceri sheldoni." (Gardiazabal et al, Proc ISCN 2002, pp 171-174).

The following were donated by Michael Kesinger, Bureau of Citrus Budwood Registration, Division Of Plant Industry, 3027 Lake Alfred Road, Winter Haven, Florida 33881-1499, United States. Received 05/01/2002.

PI 654905. Citrus maxima (Burm.) Merr.

Cultivar. "HIRADO BUNTAN"; "HIRADO"; ARB 11-17; S-DPI-833-1-65-X-E; IF-65-29; AF-66-34; IPPN 295; VI 662; RCRC 4122. Developed in Japan. Developed in United States. Pedigree - 'Hirado Buntan'. Originated as a chance seedling. The current accession, RCR 4122, is a pinl-fleshed seedling selection of the standard 'Hirado Buntan'. This is a pink-fleshed selection of 'Hirado Buntan'. According to the Citrus Industry, Vol I, p 536 (1967 edition), "Standard" 'Hirado Buntan' fruit are large, oblate, seedy, with slightly depressions at both ends. Flesh color is yellow when mature [note: this refers to the "standard" 'Hirado Buntan']. The medium-thick rind is smooth, glossy, and tightly adherent. The flesh is light greenish-yellow, tender, and moderately juicy. The segments are numerous with thin but tough carpellary membranes. Flavor is pleasant with well balance sugars and acids but with a trace of bitterness. Maturation is medium-early and storability is regarded as good. The trees are vigorous and medium-large in stature, with large, thick, broadly winged leaves. It is more cold-tolerant than most pummelos. 'Hirado Buntan' is the second most popular pummelo in Japan (after 'Banpeiyu'). According to Saunt (Citrus Varieties of the World, 2000, p 104), the pink-fleshed selection from Florida is now the preferred choice for planting. Saunt regards this selection as being of the highest quality outside of the eastern regions of Asia and to be the equal of 'Djeroek Deleema Kopjor' ('Pomelit') from South Africa. Information from Florida DPI indicates that this pink-fleshed selection has large fruit that are sweet and juicy, with around to oblate shape. The season (in Florida) is stated to be November through March, and the trees are stated to be alternate-bearing. (RRK, 08/2006).

The following were donated by John Pressler, 2PH Farms, Selma Road, Emerald, Queensland 4720, Australia; Pam Pressler, 2PH Farms, PO Box 1103, Emerald, Queensland 4720, Australia. Received 03/01/2003.

PI 654906. Citrus reticulata Blanco

Cultivar. "Emerald"; VI 669; IPPN 218; RCRC 4123. Pedigree - Unknown. Little information other than origin data is available for this variety. Australian colleagues P Barkley & M Smith have not heard of it (2003). (RRK, 08/2006).

The following were donated by Hong-Ji Su, National Taiwan University,

Department of Plant Pathology and Entomology, Taipei, Taiwan. Received 03/01/2003.

PI 654907. Citrus sinensis (L.) Osbeck

Cultivar. "Hongjian"; IPPN 229; VI 671; RCRC 4124. Pedigree - Seedling selection (1971) of 'Gailiangcheng' made at Hongjiang State Farm, Guangdong, PRC. See Zhong, Proc Int Citrus Symp, Guangzhou, PRC, Nov 1990, pp 149-154. 'Hongjiang' is one of the major cultivars in western Guangdong Province, PRC. It has an orange-red peel and red pulp and ripens in December. See Zhong, Proc Int Citrus Symp, Guangzhou, PRC, Nov 1990, pp 149-154. (RRK, 08/2006).

The following were donated by Roland Cottin, INRA Station de Recherche Agronomique, San Giuliano 20230, San Nicolao, Corsica, France. Received 03/01/2003.

PI 654908. Fortunella japonica (Thunb.) Swingle

Cultivar. "Marumi"; SRA 489; IPPN 237; VI 673; RCRC 4125. Pedigree - The SRA website states that this accession was introduced to Corsica as budwood but no origin is shown.

The following were donated by Luis Navarro, IVIA, Apartado Oficial 46071, Carretera de Moncada a Naquera km 4.5, Moncada, Valencia 46113, Spain. Received 03/01/2003.

PI 654909. Citrus limon (L.) Burm. f.

Cultivar. "Primifiori"; "Blanco"; "Limonero Fino 95"; "Mesero"; IVIA-95; IPPN 274; VI 674; RCRC 4126. Pedigree - 'Fino' is a Spanish variety probably originating as a seedling of 'Limon Comun de la Vega Alta del Rio Segura'. There are now a number of selections of 'Fino' in Spain. Information from IVIA: The trees are vigorous and thorny. It is productive and does not re-flower much. Harvest season is from early October through February. The fruit is slightly smaller than that of 'Verna'. The rind is smooth and thin, the shoulders round, and the apex small and sharp. The juice yield is high with elevated acidity level and medium number of seeds. 'Fino 95: new selection found in Spain? vigorous tree with presence of thorns, the shape of the fruit is not as food as in Fino 49, fruit is elongated and sometimes has a slight neck. Seedless. Harvest is two weeks earlier than Fino 49, and productivity is somewhat lower.' (Gardiazabal et al, Proc ISCN 2001, pp 171-174). (RRK, 08/2006).

The following were developed by Trout Hall Limited, Jamaica. Donated by David J. Gumpf, University of California, Department of Plant Pathology, Riverside, California 92521, United States; David J. Gumpf, University of California, Department of Plant Pathology, Riverside, California 92521, United States; Trout Hall Limited, Jamaica. Received 03/01/2003.

PI 654910. Citrus x tangelo J. W. Ingram & H. E. Moore

Cultivar. "JAMAICAN UGLI"; TH-53; VI 675; IPPN 277; RCRC 4127. Pedigree - Unknown. Probable budsport. It is unknown how this selection differs from other 'Ugli' selections currently maintained (PI 132721/RCRC 2780 and RCRC 4171). (RRK, 08/2007).

The following were donated by Andrew W. Scott, Rio Farms Inc., Rt. 1, Box 326, Monte Alto, Texas 78538, United States. Received 03/01/2003.

PI 654911. *Citrus sinensis* (L.) Osbeck

Cultivar. "Rio Farms Vainiglia"; IPPN 278; VI 676; RCRC 4128. Pedigree - Unknown. Probable budsport. Heinz Wutscher (about 1997) indicated that this selection colors well in Texas. Observed: fruit medium sized, slightly flat, some flesh color showing. The fruit observed at Rio Farms indicates that this selection may develop better color than current selections maintained at Riverside, since south Texas winters are typically mild with smaller diurnal temperature fluctuations. This is probably not the true Vainiglia variety, which is white fleshed and low in acid, but perhaps the Vainiglia Sanguino (pink fleshed due to lycopenes, but not a true blood orange). (RRK, 08/2006).

The following were collected by Tom Van der Zwet, Appalachian Fruit Research Station, USDA-REE-ARS-NAA-AFR LAB-IFPI&P, Room 335, Kearneysville, West Virginia 25430-9425, United States. 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 04/16/1991.

PI 654912. *Pyrus* sp.

Cultivar. Y-126; "Siljka"; Q 21243. Collected in Former Serbia and Montenegro. Developed in Former Serbia and Montenegro. Pedigree - Uncertain.

The following were donated by Suzanne Hurtt, USDA, ARS, Plant Germplasm Quarantine Office, Building 580, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 04/16/1991.

PI 654913. *Pyrus communis* subsp. *pyraster* (L.) Ehrh.

Uncertain. Q 21415. Developed in Poland. Pedigree - Uncertain.

PI 654914. *Pyrus* sp.

Breeding. Q 22418; F2-3-131. Developed in Romania. Pedigree - Uncertain.

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 04/16/1991.

PI 654915. *Pyrus* sp.

Breeding. Q 22420; F2-8-194. Developed in Romania. Pedigree - Uncertain.

The following were donated by Suzanne Hurtt, USDA, ARS, Plant Germplasm Quarantine Office, Building 580, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 04/16/1991.

PI 654916. *Pyrus* sp.

Breeding. Q 22423; FE-12-139. Developed in Romania. Pedigree - Uncertain.

PI 654917. *Pyrus ussuriensis* Maxim.

Cultivar. "Chinlon Li"; Q 25058. Developed in China. Pedigree - Uncertain.

PI 654918. *Pyrus ussuriensis* Maxim.

Cultivar. "Tu Li"; Q 25060. Developed in China. Pedigree - Uncertain.

PI 654919. *Pyrus pyrifolia* (Burm. f.) Nakai

Cultivar. "Singo"; Q 25251. Developed in Korea, South. Pedigree - Uncertain. Asian cultivar. Synonym for 'Niitaka' according to <http://www.virginiagoldorchard.com/descriptions.html> (08/06/2003).

PI 654920. *Pyrus communis* L.

Cultivar. "Colmar d'Ete"; Q 25950. Developed in Uncertain. Pedigree - Uncertain. Swans Egg. A pear of ordinary size; of elliptical form; a long stem; the skin green, thinly covered in part with brown: the flesh melting, and full of a pleasant musky juice; ripens in November, and with care may be preserved for some time. This fruit is by many called the Poire d'Auch; this must be in error; Forsyth says the Poire d'Auch resembles the Colmart, but fuller in the neck; the Colmart is delineated by the Abbe Rozier as a very different pear, much larger, with a distinct neck: see figure no. 44 (Colmart). -- W. Coxe, A view of the cultivation of fruit trees, 1817. Swan Egg. Very old and unworthy of cultivation. Synonyms: Colmar d'Ete, Egg Pear, Eyer pear, Knevett's New Swan's Egg, Little Swan's Egg, Moor Fowl El Egg (incorrectly), Moor-fowl's Egg of Boston, New Swan's Egg, Poire d'Augh, Poire d'Euf, Swans Egg. -- W.H. Ragan, Nomenclature of the Pear, 1908.

PI 654921. *Pyrus communis* L.

Cultivar. "Magnate"; Q 25952. Developed in Uncertain. Pedigree - Uncertain.

The following were donated by Pu Fu-Shen, Chinese Academy of Agricultural Science, Research Institute of Pomology, Xingcheng, Liaoning 110161, China. Received 03/05/1984.

PI 654922. *Pyrus* sp.

"Tsu Li #2"; Q 24394; TSU LI #2.

The following were donated by Robert C. Lamb, New York State Agric. Exp. Station, Department of Horticulture, Geneva, New York 14456, United States. Received 12/14/1984.

PI 654923. *Pyrus pyrifolia* (Burm. f.) Nakai

Cultivar. "5053"; Q 25265. Collected in Nepal.

The following were donated by B.D.K. Parfitt, Ministry of Agriculture, Fisheries & Food, Brogdale Exp. Hort. Station, National Fruit Trials, Faversham, England ME13 8X2, United Kingdom. Received 02/27/1986.

PI 654924. *Pyrus communis* L.

Cultivar. "MARTIN SEC"; "Martin Sec"; Q 25951. Martin Sec. Hogg (1884) tells us that this and the Martin Sire are among the earliest varieties known to have been grown in England, for they are mentioned among the fruits delivered into the Treasury by the fruiterer of Edward I in 1292. In 1530, Charles Estienne of Paris wrote of it as being cultivated in France and affirmed the Pears of Saint Martin were so named because their time of ripening coincided with the Festival of the Saint. Again in 1675 Merlet in his *Abrege des bons fruits* spoke of the Martin-Sec of Provins or of Champagne. Fruit medium or above, long-pyriform-obtuse, regular in form, yellowish and russeted, dotted with gray points and extensively washed with carmine on the face exposed to the sun; flesh whitish, semi-fine, very breaking, rather dry, but sweet and perfumed, very gritty when grafted on quince; third; mid-Nov to Feb. -- Hedrick, *The Pears of New York*, 1921. Sec. Synonyms: Dry Martin, Martin Sec, Martin Sec de Champagne, Martin Sec d'Hiverde Provence, Rousselet d'Hyber, Rousselette d'Hiver, Troken Martin, Winter Rousselet, Winter Rousselette. -- W.H. Ragan, *Nomenclature of the Pear*, 1908. Martin Sec. This is a pear of moderate size, of a long pyramidal form, the color a clear red next the Sun, dotted with small white points, the flesh breaking, sometimes a little stony, surary, slightly perfumed, and of a pleasant taste - the stalk is long and bent, the eye small, but little sunk; it ripens in November and December. -- W. Coxe, *A view of the cultivation of fruit trees*, 1817.

The following were donated by Harry Baker, Royal Horticultural Society Garden, Wisley, Woking, Surrey, England, United Kingdom. Received 05/09/1986.

PI 654925. *Pyrus* sp.

Cultivar. "MARIE LOUISE D'UCCLE"; "Marie Louise D'ucclle"; Q 26193. Pedigree - Open pollinated Marie Louise.

The following were collected by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; David Brenner, Iowa State University, Regional Plant Introduction Station, Room G212, Agronomy Building, Ames, Iowa 50011-1170, United States. Donated by Maxine Thompson, Oregon State University, Department of Horticulture, Cordley Hall 2042, Corvallis, Oregon 97331-2911, United States. Received 12/13/1988.

PI 654926. *Pyrus* sp.

Cultivar. T&B 880513; "Joghoso I"; "JOGHOSO I"; Q 27421. Collected 11/05/1988 in Northern Areas, Pakistan. Latitude 36° 17' N. Longitude 74° 35' E. Elevation 2092 m. On the farm of Ghulam Abbas, village of Murtazabad (Hunza), in the Gilgit district. Silt soil well drained, full sun on terraced land, southern aspect. River valley in mountains. Apples, apricots, grapes and wheat. Pedigree - Collected from the wild in Pakistan. *Pyrus* sp. 'Joghoso I'. Scions collected from cultivated tree by M. Thompson & D. Brenner on 5 November, 1988 in Pakistan (Northern Areas, Gilgit District) on the farm of Ghulam Abbas near the town of Murtazabad (Hunza). Farm is in a river valley at 2092 m elevation; Latitude 36° 17 min. N, Longitude 74° 35 min. E. Collectors note 'Fruit pyriform, yellow, medium size. Said to keep very long. May be same as Joghoso II.' - Collection notebook, 1988.

PI 654927. *Pyrus* sp.

Cultivar. T&B 880566; "Gompapa"; "GOMPAPA"; Q 27427. Collected 11/10/1998 in Northern Areas, Pakistan. Latitude 35° 18' N. Longitude 75° 38' E. Elevation 2246 m. Growing in the Department of Agriculture Nursery, Skardu, Baltistan district. Silt soil well drained, full sun on terraced land. River valley in mountains. Many deciduous fruit trees. *Pyrus* sp. 'Gompapa'. Brought from Kashmir by Mr. Gompapa. May be an old British introduction. Scions collected from cultivated tree by M. Thompson & D. Brenner on 10 November, 1988 in Pakistan (Northern Areas, Baltistan District) at town of Skardu. Grown at the Department of Agriculture Nursery. Tree is located in a river valley at 2246 m elevation; Latitude 35° 18 min. N, Longitude 75° 38 min. E. Collectors note 'Did not see the fruit, but is said to be very large, 0.5 to 1.0 kg(?). Fruit very firm, can store until March. The longest keeping pear in Baltistan. Grown only in the village of Cuardo (across the river from the nursery) where it was introduced by Mr. Gompapa.' - Collection notebook, 1988.

PI 654928. *Pyrus* sp.

Cultivar. T&B 880730; "NASHPATI II"; "Nashpati II"; Q 27446. Collected 11/25/1988 in North-West Frontier, Pakistan. Latitude 34° 59' N. Longitude 72° 23' E. Elevation 1200 m. On a farm, Shangoti, 25 km northwest of Mingora, Swat district. Terraced well drained soil in full sun, river valley in mountains. *Pyrus* sp. 'Nashpati II'. Scions collected from cultivated tree by M. Thompson & D. Brenner on 25 November, 1988 in Pakistan (Northwest Frontier, Swat District) near village of Shangoti (about 25 km NW of Mingora). Tree is growing on a small farm at 1200 m elevation; Latitude 34° 59 min. N, Longitude 72° 23 min. E. Collectors note: Fruit said to be softer than others (except Paraow) at maturity. Not sure if this is the same as Nashpati I (No. 880714). - Collection notebook, 1988.

PI 654929. *Pyrus communis* L.

Cultivar. T&B 880715; "PARAOW"; "Paraow"; Q 27456. Collected 11/24/1988 in North-West Frontier, Pakistan. Latitude 35° 1' N. Longitude 72° 28' E. Elevation 1250 m. On grounds of the Baghderai Hotel, Baghderai, about 45 km north of Mingora, Swat district. Full sun, river valley in mountains. Other pear trees in the area. *Pyrus communis* 'Paraow'. Scions collected from cultivated tree by M. Thompson & D. Brenner on 24 November, 1988 in Pakistan (Northwest Frontier, Swat District) in village of Baghderai (about 45 km north of Mingora). Tree is growing on the grounds of the Baghderai Hotel. Located in a river valley at 1250 m elevation; Latitude 35° 01 min. N, Longitude 72° 28 min. E. Collectors note 'The most popular variety in Swat. The largest fruit and longest storage. Not *Pyrus pyrifolia* - looks more like *P. communis*. - Collection notebook, 1988.

The following were donated by V. Rehak, Research & Breeding Inst. of Pomology, 507 51, Holovousy v Podkrkonosi, Slovakia. Received 01/26/1989.

PI 654930. *Pyrus communis* L.

Cultivar. "VILA"; "Vila"; BE-2163; Q 27592.

The following were donated by T. Sanada, Fruit Tree Research Station, Ministry of Agric., Forestry and Fishing, Division of Fruit Breeding, Yatabe, Tsukuba, Ibaraki 305, Japan. Received 04/09/1990.

PI 654931. *Pyrus* sp.

Cultivar. "Waseaka"; BE-2895; Q 28034.

The following were donated by Mario Aggabio, Inst. of Study of Bio-Ag. of Med. Trees, Via E. De Nicola, 1, Sassari, Sardinia, Italy; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 02/08/1993.

PI 654932. *Pyrus communis* L.

"Antoni Sale"; Q 29571; ANTONI SALE.

The following were donated by Mario Aggabio, Inst. of Study of Bio-Ag. of Med. Trees, Via E. De Nicola, 1, Sassari, Sardinia, Italy. Received 02/08/1993.

PI 654933. *Pyrus communis* L.

"De Su Duca"; Q 29577; DE SU DUCA.

The following were donated by Lorenzo Rivalta, Istituto Sperimentale per la Frutticoltura, Sezione di Forli, Via Zanchini, 6 C.P. 3171, Forli, Emilia-Romagna 47100, Italy. Received 04/23/1996.

PI 654934. *Pyrus* sp.

Cultivar. "Tosca"; "ISF-FO 68-21-37-11 (Tosca)"; Q 36157. Pedigree - Coscia/William. Harvested second-third week of July, fruit of 180 g. with crispy flesh but juicy and good conservation, stores longer than Coscia.

The following were donated by Sonja Maznevskaja, Faculty of Agriculture, Skopje, Macedonia. Received 01/07/1997.

PI 654935. *Pyrus communis* L.

Cultivar. "ZIMSKA KAJUSKA"; "Zimska Kajuska"; Q 36686.

The following were donated by N.I. Vavilov Institute of Plant Industry, 44 Herzen Street, Leningrad, Leningrad 190000, Russian Federation. Received 01/13/1988.

PI 654936. *Pyrus communis* L.

Cultivar. "BESSEMIANKA"; "Bessemianka"; VIR 2669; BE-1634; C-20021; Q 27066; CPYR 2706. Collected in Former Soviet Union. Pedigree - Unknown. Introduced from Russia in 1879. Synonyms: Bessimianka, No. 508, Samenlose, Seedless. -- W.H. Ragan, Nomenclature of the Pear, 1908. The word 'Besi' or 'Bezy' is of Breton origin and signifies a wild pear. -- U. P. Hedrick, The Pears 1921. 'Bessimianka' is Russian for 'seedless' - J. Postman, 2006.

The following were donated by Robert C. Lamb, New York State Agric. Exp. Station, Department of Horticulture, Geneva, New York 14456, United States. Received 12/14/1984.

PI 654937. *Pyrus pashia* Buch.-Ham. ex D. Don
Cultivar. "5049"; Q 25264. Collected in Nepal.

PI 654938. *Pyrus pyrifolia* (Burm. f.) Nakai
Cultivar. "5137"; Q 25270. Collected in Nepal.

The following were donated by Maxine Thompson, Oregon State University, Department of Horticulture, Cordley Hall 2042, Corvallis, Oregon 97331-2911, United States. Received 12/13/1988.

PI 654939. *Pyrus* sp.
Cultivar. T&B 880719; "Khan Tangoo 1"; "KHAN TANGOO I"; Q 27435.
Collected in Pakistan. Latitude 34° 55' 59" N. Longitude 72° 28' 0" E. Elevation 1240 m. Swat district, Nawakalay (Khwazakhela) village, about 35 km north of Mingora. Collected from Mohamed Khan's farm. River valley in mountain. Pedigree - Collected from cultivation in Pakistan. *Pyrus* sp. 'Khan Tangoo I'. Scions collected from cultivated tree by M. Thompson & D. Brenner on 24 November, 1988 in Pakistan (Northwest Frontier, Swat District) in village of Nawakalay (about 35 km north of Mingora). Tree is growing on the farm of Mohamed Khan, in a river valley at 1240 m elevation; Latitude 34° 59 min. N, Longitude 72° 28 min. E. Collectors note 'Said to be recently introduced, to have very high quality, and to hold on tree until the end of October.' - Collection notebook, 1988.

The following were donated by Marie-France Tarboureich, Conservatoire Botanique Alpin de Gap-Charance, Syndicat Mixte, Domaine de Charance, France. Received 03/18/1996.

PI 654940. *Pyrus communis* L.
Cultivar. "Sartean Rogue"; "SARTEAU ROGUE"; Q 36088.

The following were donated by Alberta Agriculture, Alberta Tree Nursery & Hort. Centre, R.R. 6, Edmonton, Alberta T5B 4K3, Canada. Received 12/03/1986.

PI 654941. *Pyrus* hybrid
SIM 103-1; BE-0998; Q 26618.

PI 654942. *Pyrus* hybrid
SIM 117-11; BE-0998; Q 26641.

The following were donated by T. Sanada, Fruit Tree Research Station, Ministry of Agric., Forestry and Fishing, Division of Fruit Breeding, Yatabe, Tsukuba, Ibaraki 305, Japan. Received 07/15/1986.

PI 654943. *Pyrus pyrifolia* (Burm. f.) Nakai
Cultivar. "HAKKO"; "Hakko"; BE-1115; Q 26690.

The following were donated by Pu Fu-Shen, Chinese Academy of Agricultural Science, Research Institute of Pomology, Xingcheng, Liaoning 110161, China. Received 03/05/1984.

PI 654944. *Pyrus* sp.

Cultivar. "FU-WU-SHIAN"; Q 24381; Fu-Wu-Shian.

The following were donated by Harry Baker, Royal Horticultural Society Garden, Wisley, Woking, Surrey, England, United Kingdom. Received 05/09/1986.

PI 654945. *Pyrus communis* L.

Cultivar. "BELISSIME D'HIVER"; Beauty of Summer; Q 26190; Bellissime d'Hiver. Pedigree - Unknown. A very old French cultivar of uncertain origin but first described in 1768. One of the best culinary pears. Tree growth is upright and fairly compact. Pears need cooking slowly for 1-2 hours after which time they turn pink. -- Arbury 1997. & issime d'Hiver (Angleterre d'Hiver; Belle Noisette; De Bure; Teton de Venus). Fruit very large, turbinate, flattened on the apex. Skin fine green, changing to brownish-yellow on the shaded side, and fine lively red next the sun; covered all over with russety dots. Eye large, set in an open depressed basin. Stalk an inch long, inserted in an irregular cavity. Flesh white, tender, fine, sweet, mellow, and free from grittiness. A stewing pear, in season from November to April. -- R. Hogg, The Fruit Manual, 1860.

The following were donated by Maxine Thompson, Oregon State University, Department of Horticulture, Cordley Hall 2042, Corvallis, Oregon 97331-2911, United States. Received 12/13/1988.

PI 654946. *Pyrus pyrifolia* (Burm. f.) Nakai

Cultivar. T&B 880531; "SHOGHORI II"; Q 27425; Shoghorii II. Collected in Pakistan.

The following were donated by N.I. Vavilov Institute of Plant Industry, 44 Herzen Street, Leningrad, Leningrad 190000, Russian Federation. Received 03/27/1989.

PI 654947. *Pyrus* sp.

K-35414; BE-2232; 32/1116; Q 27635; N65. Collected in Former Soviet Union.

PI 654948. *Pyrus* sp.

K-23195; BE-2232; 32/1116; Q 27641. Collected in Former Soviet Union.

The following were donated by Ming Kang Liao, Academy of Agricultural Sciences, Nan Chang Road 38, Urumqi, Xinjiang 830000, China. Received 02/05/1990.

PI 654949. *Pyrus x sinkiangensis* T. T. Yu

Landrace. Luntaijuju; Q 27967; LANTAI JUJULI. Collected as *P. sinkiangensis*. Top quality pear, yellow-green skin, sweet, crisp, juicy, aromatic.

The following were donated by N.I. Vavilov Institute of Plant Industry, 44 Herzen Street, Leningrad, Leningrad 190000, Russian Federation. Received 05/06/1991.

PI 654950. Pyrus hybrid

Cultivar. "B II-3-25-27"; BE-3385; Q 28416. Collected in Former Soviet Union. Pedigree - WILLIAMS (literally VIL'YAMS)/ P. SALICIFOLIA 2-8.

The following were donated by John Henry, 5685 Bond Road, Sodus, New York, United States. Received 09/05/1997.

PI 654951. Pyrus sp.

NART; Q 37125; Nart. "Very large".

The following were donated by Vasily A. Nosulchak, N.I. Vavilov Institute of Plant Industry, Turkemnian Experiment Station, Krasnodarsky District, Turkmenia, Kara-Kala, Turkmenistan. Received 01/22/1999.

PI 654952. Pyrus sp.

Cultivar. "P. communis from Gorelde"; 19643; Q 39532; Gorelde.

PI 654953. Pyrus sp.

Cultivar. "P. communis sample No.27"; 19647; Q 39534.

PI 654954. Pyrus sp.

Cultivar. "KARADEDE 86-3"; 34352; Q 39541; Saarli 86-1.

PI 654955. Pyrus sp.

Cultivar. "KARADEDE 86-3"; 34352; Q 39542; Karadede 86-3.

Unknown source. Received 04/08/1999.

PI 654956. Pyrus sp.

Cultivar. Q 39629.

Unknown source. Received 02/10/1999.

PI 654957. Pyrus sp.

Cultivar. "SEVERYANKA KZASROSHOKAYA"; Q 39634; Severyanka Kzasroshokaya.

The following were donated by Serge N. Oleichenko, Kazakh Res. Inst. of Fruit Growing & Vit, Almaly, 238A Gagarin Avenue, Alma-Ata, Alma-Ata 4800032, Kazakhstan. Received 03/23/1993.

PI 654958. Pyrus x bretschnideri Rehder

Rootstock. BE-4590; Q 29857; Uzhi Li; UZHI LI. Rootstock cultivar.

PI 654959. Pyrus x bretschnideri Rehder

Rootstock. BE-4590; Q 29858; Baili; BAILI. Rootstock cultivar.

PI 654960. *Pyrus x bretschnideri* Rehder

Rootstock. BE-4590; Q 29859; Syan Li; SYAN LI. Rootstock cultivar.

The following were donated by Vasily A. Nosulchak, N.I. Vavilov Institute of Plant Industry, Turkemnian Experiment Station, Krasnodarsky District, Turkmenia, Kara-Kala, Turkmenistan. Received 01/22/1999.

PI 654961. *Pyrus* sp.

Cultivar. "TARAMRUT"; 14824; Q 39527; Tara Mrut.

The following were donated by Alberta Agriculture, Alberta Tree Nursery & Hort. Centre, R.R. 6, Edmonton, Alberta T5B 4K3, Canada. Received 12/03/1986.

PI 654962. *Pyrus* hybrid

SIM 117-7; BE-0998; Q 26640.

The following were donated by M. Nikolic, Institut za Vovcarstov, Cacak, Serbia. Received 01/18/1987.

PI 654963. *Pyrus* sp.

Cultivar. "SAMPIONKA"; "Sampionka"; BE-1089; Q 26670.

The following were donated by Merce Rovira, IRTA Centro Agropecuari Mas, Bove, Apartat 415, Reus, Tarragona 43200, Spain. Received 12/08/1992.

PI 654964. *Corylus avellana* L.

Cultivar. "Pinyolenc"; Floquet; Avellana petita; Pinyolenca; CCOR 567. Developed in Spain. Pedigree - selection of *C. avellana*.

The following were collected by Harry Lagerstedt, USDA/ARS, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 09/26/2001.

PI 654965. *Corylus avellana* L.

Cultivated. CCOR 766. Collected 2001 in Gotland, Sweden. Pedigree - selection of European hazel from the Swedish island Oland.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 04/04/2002.

PI 654966. *Corylus avellana* L.

Cultivar. OSU 693.040; CCOR 791; *C. avellana* OSU 693.040 W. Black Sea Cst. Pedigree - Collected from the western Black Sea coast, Turkey.

The following were collected by David Brenner, Iowa State University, Regional Plant Introduction Station, Room G212, Agronomy Building, Ames, Iowa 50011-1170, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 03/22/2006.

PI 654967. *Corylus californica* (A. DC.) Rose
Wild. CCOR 860. Collected 11/10/1984 in Oregon, United States. Scions or suckers collected from 'Prairie Peak' site (Prairie Mountain), on property owned by Weyerhaeuser in Lane County, Oregon by D.M. Brenner (accompanied by C. Johannessen and M. Thompson) on 10 November, 1984 from a native hazelnut tree with superior nut production as reported in his Masters Thesis presented to the University of Oregon in 1986.

PI 654968. *Corylus californica* (A. DC.) Rose
Wild. CCOR 861. Collected 11/10/1984 in Oregon, United States. Scions or suckers collected from 'Alderwood' site, an Oregon State Park in Lane County, Oregon by D.M. Brenner (accompanied by C. Johannessen and M. Thompson) on 10 November, 1984 from a native hazelnut tree with superior nut production as reported in his Masters Thesis presented to the University of Oregon in 1986.

PI 654969. *Corylus californica* (A. DC.) Rose
Wild. CCOR 862. Collected 11/10/1984 in Oregon, United States. Scions or suckers collected from 'Prairie Peak' site (Prairie Mountain), on property owned by Weyerhaeuser in Lane County, Oregon by D.M. Brenner (accompanied by C. Johannessen and M. Thompson) on 10 November, 1984 from a native hazelnut tree with superior nut production as reported in his Masters Thesis presented to the University of Oregon in 1986.

PI 654970. *Corylus californica* (A. DC.) Rose
Wild. CCOR 863. Collected 11/10/1984 in Oregon, United States. Scions or suckers collected from 'Alderwood' site, an Oregon State Park in Lane County, Oregon by D.M. Brenner (accompanied by C. Johannessen and M. Thompson) on 10 November, 1984 from a native hazelnut tree with superior nut production as reported in his Masters Thesis presented to the University of Oregon in 1986.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 03/22/2006.

PI 654971. *Corylus californica* (A. DC.) Rose
Wild. CCOR 864. Scions or suckers collected from 'Blue River' site, in the Willamette National Forest, Lane County, Oregon by D.M. Brenner in 1984 from a native hazelnut tree with superior nut production as reported in his Masters Thesis presented to the University of Oregon in 1986. Tree selected by M. Thompson on the basis of good growth habit and abundant catkins.

The following were collected by David Brenner, Iowa State University, Regional Plant Introduction Station, Room G212, Agronomy Building, Ames, Iowa 50011-1170, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 03/22/2006.

PI 654972. *Corylus californica* (A. DC.) Rose
Wild. CCOR 865. Collected 02/04/1985 in Oregon, United States. Scions or suckers collected from 'Salt Creek' site, in the Willamette National Forest, Lane County, Oregon by D.M. Brenner on 4 February, 1985 from a

native hazelnut tree with superior nut production as reported in his Masters Thesis presented to the University of Oregon in 1986.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 03/22/2006.

PI 654973. *Corylus californica* (A. DC.) Rose
Wild. CCOR 866.

The following were collected by David Brenner, Iowa State University, Regional Plant Introduction Station, Room G212, Agronomy Building, Ames, Iowa 50011-1170, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 03/22/2006.

PI 654974. *Corylus californica* (A. DC.) Rose
Wild. CCOR 867. Collected 11/03/1984 in Oregon, United States. Scions or suckers collected from 'Blue River' site, in the Willamette National Forest, Lane County, Oregon by D.M. Brenner in 1984 from a native hazelnut tree with superior nut production as reported in his Masters Thesis presented to the University of Oregon in 1986. Tree selected by M. Thompson on the basis of good growth habit and abundant catkins.

PI 654975. *Corylus californica* (A. DC.) Rose
Wild. CCOR 868. Collected 11/03/1984 in Oregon, United States. Scions or suckers collected from 'Lookout Ridge' site in the Willamette National Forest, Lane County, Oregon by D.M. Brenner (accompanied by C. Johannessen and M. Thompson) on 3 November, 1984 from a native hazelnut tree with superior nut production as reported in his Masters Thesis presented to the University of Oregon in 1986.

The following were collected by Carl L. Johannessen, University of Oregon, Department of Geography, College of Arts & Sciences, Eugene, Oregon 97403-1218, United States; Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; David Brenner, Iowa State University, Regional Plant Introduction Station, Room G212, Agronomy Building, Ames, Iowa 50011-1170, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 12/07/2006.

PI 654976. *Corylus californica* (A. DC.) Rose
Wild. B0049; *C. californica* B0049; CC1-101; CCOR 871. Collected 11/03/1984 in Oregon, United States. Scions or suckers collected from 'Cougar Reservoir' site in Willamette National Forest, Lane County, Oregon by D.M. Brenner (accompanied by C. Johannessen and M. Thompson) on 3 November, 1984 from a native hazelnut tree with superior nut production as reported in his Masters Thesis presented to the University of Oregon in 1986.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 12/07/2006.

PI 654977. *Corylus sieboldiana* Blume

Wild. CCOR 872; *C. sieboldiana* CC1-93; CC1-93.

The following were collected by David Brenner, Iowa State University, Regional Plant Introduction Station, Room G212, Agronomy Building, Ames, Iowa 50011-1170, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 12/07/2006.

PI 654978. *Corylus californica* (A. DC.) Rose

Wild. B0071; *C. californica* B0071; CC1-103; CCOR 873. Collected 11/03/1984 in Oregon, United States. Scions or suckers collected from 'Blue River' site, in the Willamette National Forest, Lane County, Oregon by D.M. Brenner in 1984 from a native hazelnut tree with superior nut production as reported in his Masters Thesis presented to the University of Oregon in 1986. Tree selected by M. Thompson on the basis of good growth habit and abundant catkins.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 12/07/2006.

PI 654979. *Corylus sieboldiana* Blume

Wild. 86028; CCOR 874; *C. sieboldiana* 86028; CC1-19; CC1-17; CC1-23. Collected in Korea, South.

PI 654980. *Corylus sieboldiana* Blume

Wild. 86029; CCOR 875; *C. sieboldiana* 86029; CC1-47; CC1-29; CC1-36; CC1-34. Collected in Korea, South.

PI 654981. *Corylus sieboldiana* Blume

Wild. 86030; *C. sieboldiana* 86030; CC1-52; CC1-54; CC1-64; CCOR 876; CC1-60; CC1-61. Collected in Korea, South.

PI 654982. *Corylus sieboldiana* Blume

Wild. 86031; *C. sieboldiana* 86031; CC1-76; CCOR 877; CC1-89; CC1-68; CC1-79.

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; Luigi Meneghelli, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 04/10/2006.

PI 654983. *Corylus avellana* L.

Cultivar. "Santiam"; OSU 509.064; CCOR 858. Pedigree - OSU 239.159 x VR 17-15. 'Santiam' (OSU 509.064) was developed and evaluated at Oregon State University, Corvallis, Oregon, and it was released in February 2005. This cultivar has complete resistance to eastern filbert blight (EFB) caused by *Anisogramma anomala* (Peck) E. Müller. Resistance is conferred by a single dominant gene from 'Gasaway.' Compared to 'Barcelona,' 'Santiam' is a smaller tree and has

higher yield efficiency, higher percent kernel, and smaller nuts. Nuts mature and fall free of the husk about 2 weeks before 'Barcelona.' -- R.L McCluskey, S.A. Mehlenbacher, D.C. Smith, and A.N. Azarenko. 2005. (website active December 2007)
<http://extension.oregonstate.edu/catalog/html/em/em8890-e/>.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States; Luigi Meneghelli, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 04/10/2006.

PI 654984. *Corylus avellana* L.
Cultivar. "Sacajawea"; CCOR 859.

Unknown source. Received 10/26/2007.

PI 654985. *Corylus americana* Marshall
Wild. CCOR 883. Collected 10/25/2007 in Delaware, United States.

Unknown source. Received 10/31/2007.

PI 654986. *Corylus avellana* L.
Cultivated. CCOR 884. Collected 09/30/2007 in Nagorno-Karabakh, Azerbaijan.

Unknown source. Received 10/31/2007.

PI 654987. *Corylus avellana* L.
Cultivated. CCOR 885. Collected 09/30/2007 in Nagorno-Karabakh, Azerbaijan.

Unknown source. Received 10/31/2007.

PI 654988. *Corylus avellana* L.
Wild. CCOR 886. Collected 10/01/2007 in Nagorno-Karabakh, Azerbaijan.

Unknown source. Received 09/03/2008.

PI 654989. *Corylus avellana* L.
Cultivar. CCOR 887.

The following were donated by Indiana Berry and Fruit Co., 5218 West 500 S., Huntingburg, Indiana 47542, United States. Received 02/25/1999.

PI 654990. *Rubus hybrid*
Cultivar. "Titan"; NY 883; CRUB 1993. Pedigree - Hilton x NY 598(Newburgh x September).

The following were donated by Forest Farm Nursery, 990 Tetherow Road, Williams, Oregon 97544-9599, United States. Received 04/15/2008.

- PI 654991. *Rubus deliciosus* Torr.**
Wild. Boulder Raspberry; rude065; CRUB 2511.
- PI 654992. *Rubus parvus* Buchanan**
Wild. New Zealand GC Bramble; rupa576; CRUB 2512.
- PI 654993. *Rubus biflorus* Buch.-Ham. ex Sm.**
Wild. R. biflorus; rubi056; fen zhi mei; CRUB 2513.

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 04/29/2008.

- PI 654994. *Rubus hybrid***
Cultivar. ORUS 1523-4; CRUB 2514.
- PI 654995. *Rubus hybrid***
Cultivar. ORUS 1793-1; CRUB 2515.
- PI 654996. *Rubus hybrid***
Cultivar. ORUS 2711-1; CRUB 2516.
- PI 654997. *Rubus hybrid***
Cultivar. NZ 9672-1; CRUB 2517.
- PI 654998. *Rubus hybrid***
Cultivar. ORUS 728-3; CRUB 2518.

The following were developed by Inst. Pfl.-Zucht, Bernburg, Germany. Donated by Karl Hammer, Inst. fur Pflanzengenetik und Kulturpflanzenforschung, (IPK), Genebank, Gatersleben, Saxony-Anhalt D-06466, Germany. Received 1992.

- PI 654999. *Trifolium incarnatum* L.**
Cultivar. "Bernburger Inkarnatklée"; TRIF 48.

The following were developed by Zentralst. Sortenw., Waldheimer Str. 219, Nossen, Germany. Donated by Karl Hammer, Inst. fur Pflanzengenetik und Kulturpflanzenforschung, (IPK), Genebank, Gatersleben, Saxony-Anhalt D-06466, Germany. Received 1992.

- PI 655000. *Trifolium incarnatum* L.**
Cultivar. "Chlumecky"; TRIF 82.
- PI 655001. *Trifolium incarnatum* L.**
Cultivar. "Kemenesaljai"; TRIF 84.
- PI 655002. *Trifolium incarnatum* L.**
Cultivar. "Hatif a Fleur Rouge"; TRIF 83.

The following were developed by Czechoslovakia Research and Breeding Institute for Fodder, Zahradni 1, Troubsko, Brno, Czech Republic. Donated by Karl Hammer, Inst. fur Pflanzengenetik und Kulturpflanzenforschung, (IPK), Genebank, Gatersleben, Saxony-Anhalt D-06466, Germany. Received 1992.

PI 655003. *Trifolium incarnatum* L.
Cultivar. "Kardinal"; TRIF 247; L 1524.

The following were developed by Zentralst. Sortenw., Waldheimer Str. 219, Nossen, Germany. Donated by Karl Hammer, Inst. fur Pflanzengenetik und Kulturpflanzenforschung, (IPK), Genebank, Gatersleben, Saxony-Anhalt D-06466, Germany. Received 1992.

PI 655004. *Trifolium incarnatum* L.
Cultivar. "Tardif a Fleur Blanche"; TRIF 87.

The following were collected by R Maly, Italy. Donated by Karl Hammer, Inst. fur Pflanzengenetik und Kulturpflanzenforschung, (IPK), Genebank, Gatersleben, Saxony-Anhalt D-06466, Germany. Received 1992.

PI 655005. *Trifolium incarnatum* L.
Wild. 298; TRIF 29. Collected 1950 in Italy. Catanzaro Marina, Prov. Catanzaro.

The following were donated by Karl Hammer, Inst. fur Pflanzengenetik und Kulturpflanzenforschung, (IPK), Genebank, Gatersleben, Saxony-Anhalt D-06466, Germany; Landw. Stat., Sacavem, Lisboa, Portugal. Received 1992.

PI 655006. *Trifolium incarnatum* L.
Uncertain. TRIF 17; L894.

The following were donated by Evelin Willner, Institut fur Pflanzengenetik und Kulturpflanzenforschung, Genebank - Teilsammlungen Nord, Inselstr. 9, Malchow/Poel, Mecklenburg-W.P. D-23999, Germany. Received 1992.

PI 655007. *Trifolium incarnatum* L.
Uncertain. LE 1193.

The following were developed by Grant McLeod, Agriculture and Agri-Food Canada, Semiarid Prairie Agricultural Research Centre, #1, Airport Road, Swift Current, Saskatchewan S9H 3X2, Canada. Received 09/23/2008.

PI 655008. *Elymus trachycaulus* subsp. *subsecundus* (Link) A. Love & D. Love
Breeding. Population. SPRIG. Pedigree - Originates from germplasm collected from 25 sites in Alberta and 7 sites in Southwestern Saskatchewan. Developed to preserve germplasm of awned wheatgrass and to provide seed of locally adapted material for conservation, re-vegetation and reclamation purposes at a reasonable cost. Numbers of reproductive tillers ranged from 32 to 135 with a mean value of 52. Plant height was less variable ranging from 66 to 84 cm and a mean of 74 cm. Mean crown circumference was 42 cm and ranged from 35 to 64 cm. Mean number of days to anthesis was 192 and the range was 188 to 194.

The following were developed by Brent Hulke, USDA, ARS, Northern Crop Science Laboratory, 1307 18th Street North, Fargo, North Dakota 58105, United States. Received 09/30/2008.

PI 655009. *Helianthus annuus* L.

Genetic. HA 458. Pedigree - HA 434*4/PI 468435. BC3F5-derived BC3F6 maintainer genetic stock. Resistant to the North American races 730, 733, and 770 and to the French race 304. Inheritance studies indicated that the resistance was controlled by a single, dominant gene and preliminary molecular marker comparisons indicated that this resistance gene was different from both the PI6 and PI8 genes. Averaged 865 g kg⁻¹ oleic fatty acid in seed from plants grown in the Fargo, ND field nursery during the summer of 2005.

PI 655010. *Helianthus annuus* L.

Genetic. HA 459. Pedigree - HA 434*4/PI 435434. BC3F5-derived BC3F6 maintainer genetic stock. Resistant to the North American races 730, 733, and 770, but is susceptible to the French race 304. Averaged 873 g kg⁻¹ oleic fatty acid in seed from plants grown in the Fargo, ND field nursery during the summer of 2005.

PI 655011. *Helianthus annuus* L.

Genetic. HA 460. Pedigree - HA 434*4\RHA 340. BC3F3-derived BC3F4 maintainer genetic stock. Resistant to the North American races 730, 733, and 770 and to the French race 304. Averaged 888 g kg⁻¹ oleic fatty acid in seed from plants grown in the Fargo, ND field nursery during the summer of 2005. The first maintainer genetic stock released to combine the high oleic fatty acid characteristic with the PI8 downy mildew resistance.

PI 655012. *Helianthus annuus* L.

Breeding. Pureline. RHA 461. Pedigree - RHA 418/RO 12-13//RHA 274/Dobritch. F6-derived F7 maintainer line.

PI 655013. *Helianthus annuus* L.

Breeding. Pureline. RHA 462. Pedigree - RHA 439/IS PH RES. F6-derived F7 restorer line.

PI 655014. *Helianthus annuus* L.

Breeding. Pureline. RHA 463. Pedigree - RHA 440/PSC 8. F6-derived F7 restorer line.

PI 655015. *Helianthus annuus* L.

Breeding. Pureline. RHA 464. Pedigree - RHA 418/RHA 419/3/RHA 801//RHA 365/PI 413047. F6-derived F7 restorer.

The following were developed by Pioneer Hi-Bred International, Inc., Johnston, Iowa 50131, United States. Received 10/01/2008.

PI 655016 PVPO. *Zea mays* L. subsp. *mays*

Cultivar. "PHHMH". PVP 200800375.

PI 655017 PVPO. *Zea mays* L. subsp. *mays*

Cultivar. "PHP5D". PVP 200800376.

PI 655018 PVPO. Zea mays L. subsp. mays
Cultivar. "PHP8R". PVP 200800377.

PI 655019 PVPO. Zea mays L. subsp. mays
Cultivar. "PHW4C". PVP 200800378.

PI 655020 PVPO. Zea mays L. subsp. mays
Cultivar. "PHWNJ". PVP 200800379.

PI 655021 PVPO. Zea mays L. subsp. mays
Cultivar. "PHECH". PVP 200800380.

PI 655022 PVPO. Zea mays L. subsp. mays
Cultivar. "PHPDM". PVP 200800381.

PI 655023 PVPO. Zea mays L. subsp. mays
Cultivar. "PHH8E". PVP 200800391.

PI 655024 PVPO. Zea mays L. subsp. mays
Cultivar. "PHPT2". PVP 200800408.

The following were developed by Terra Protect Seeds GmbH, Germany. Received 10/02/2008.

PI 655025 PVPO. Brassica juncea (L.) Czern.
Cultivar. "ENERGY". PVP 200500282.

PI 655026 PVPO. Sinapis alba L.
Cultivar. "ACCENT". PVP 200500283.

The following were developed by 3 Star Lettuce, LLC, United States. Received 10/02/2008.

PI 655027 PVPO. Lactuca sativa L.
Cultivar. "HEART OF GOLD". PVP 200800389.

The following were developed by Pickseed West, Inc., United States. Received 10/02/2008.

PI 655028 PVPO. Lolium perenne L.
Cultivar. "SEVILLE 3". PVP 200800390.

The following were developed by Oregon State University, Oregon, United States. Received 10/02/2008.

PI 655029 PVPO. Triticum aestivum L. subsp. aestivum
Cultivar. "GOETZE"; ORH010920. PVP 200800393. Pedigree - OR8303765/E81FR.
Soft white winter wheat.

PI 655030 PVPO. Triticum aestivum L. subsp. aestivum
Cultivar. "NORWEST 553". PVP 200800394. Pedigree - 95B343/Isengrain.
Hard red winter wheat.

The following were developed by WestBred LLC, United States. Received 10/02/2008.

PI 655031 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. "WB 1020M". PVP 200800397.

The following were developed by Resource Seeds, Inc., United States. Received 10/02/2008.

PI 655032 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. "BLANCA FUERTE". PVP 200800398. Hard white spring wheat.

PI 655033 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. "BLANCA ROYALE". PVP 200800399. Hard white spring wheat.

PI 655034 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. "LARIAT". PVP 200800400.

PI 655035 PVPO. X *Triticosecale* sp.
Cultivar. "888". PVP 200800401.

PI 655036 PVPO. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Cultivar. "RSI 59". PVP 200800402.

PI 655037 PVPO. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Cultivar. "VOLANTE". PVP 200800403.

The following were developed by Pflanzenzucht Oberlimpurg, Germany. Received 10/02/2008.

PI 655038 PVPO. X *Triticosecale* sp.
Cultivar. "PACHECO". PVP 200800406.

PI 655039 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. "VOLT". PVP 200800407.

The following were developed by Pure Seed Testing, Inc., United States. Received 10/02/2008.

PI 655040 PVPO. *Festuca arundinacea* Schreb.
Cultivar. "ENDEAVOR II". PVP 200800409.

PI 655041 PVPO. *Poa pratensis* L.
Cultivar. "JUMP START". PVP 200800410.

The following were developed by Idaho Agricultural Experiment Station, Idaho, United States. Received 10/02/2008.

PI 655042 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. "BITTERROOT". PVP 200800411.

The following were donated by W. S. Lanterman, Saanichton Research and Plant Quarantine Station, Sidney, British Columbia V8L 1H3, Canada. Received 02/28/1989.

PI 655043. *Cydonia oblonga* Mill.

Breeding. "Quince S"; CCYD 57. Developed in United States. Pedigree - Uncertain.

The following were donated by Jim Gilbert, Northwoods Wholesale Nursery, 28696 S. Cramer Road, Molalla, Oregon 97038, United States. Received 02/25/1993.

PI 655044. *Cydonia oblonga* Mill.

Cultivar. "Orange"; CCYD 85. Orange (Apple) - Early ripening habit has made this the leading quince grown in the Northeast United States. Orange is a group rather than a distinct genotype. Its origin is uncertain. Many orange or apple-shaped quince came to be called 'Orange' or 'Apple', and they were thought to come true from seed, resulting in several strains. Fruit: large to very large, nearly round, faintly ribbed; skin bright golden-yellow to greenish-yellow, very pubescent; flesh orange-yellow, tender, fine texture, aromatic; early mid-season. Quality very good when grown in the north where it ripens during cool weather. In New Jersey and south, it often ripens when temperatures are high, resulting in inferior size, flavor and color. Tree: vigorous, hardy, productive. - Brooks and Olmo Register of Fruit and Nut Varieties.

PI 655045. *Cydonia oblonga* Mill.

Cultivar. "Smyrna"; CCYD 87. Developed in Turkey. Brought from Smyrna, Turkey by R. C. Roeding of Fresno, California in 1897. Fruit: oblong to pyriform, large to v. large, furrowed; skin lemon yellow with brown pubescence; flesh light yellow, fragrant, mild; ripens with Orange; excellent keeper, stores longer than other quince cultivars in refrigeration. Tree: small but vigorous; large, thick leaves; self-fruitful, needs 200 hours chilling. - Brooks and Olmo Register of Fruit and Nut Varieties. This is a new variety introduced in 1897 by G.C. Roeding, Fresno, California. It seems to have found a prominent place in California, but as yet is hardly tested in the East. The plant is a handsome ornamental. The variety is well worth trying. Tree a rapid and very vigorous grower with many large leaves. Fruit large, round-oblong; surface lightly furrowed, lemon-yellow; season about that of Orange, the fruit keeping well; flesh tender, very aromatic, mild subacid; quality good to very good. -- U.P. Hedrick, Cyclopedia of Hardy Fruits, 1922.

The following were developed by Luther Burbank, Santa Rosa, California, United States. Donated by Jim Gilbert, Northwoods Wholesale Nursery, 28696 S. Cramer Road, Molalla, Oregon 97038, United States. Received 02/25/1993.

PI 655046. *Cydonia oblonga* Mill.

Cultivar. "Van Deman"; CCYD 88. Collected in California, United States. Elevation 0 m. Pedigree - Orange Quince x Portugal Quince. Originated in Santa Rosa, California by Luther Burbank. Selected from among 700 crosses of Orange x Portugal. Introduced in 1891. Fruit: very large, oblong to pyriform; skin smooth, pale orange with little pubescence;

flesh pale yellow, rather coarse, slightly astringent, aromatic, subacid, juicy, becomes deep red when cooked; core large, open. Tree: vigorous, prolific, hardier than other quince cultivars. Named in honor of pomologist H.E. Van Deman. -- Brooks and Olmo Register of Fruit and Nut Varieties. 'This variety is one of the very best, in every respect, I have ever examined, and the tree is reported as exceedingly thrifty and productive.' Mr. Burbank writes to me that 'in California it often bears three distinct crops a year, and sometimes four; the last of the fourth is generally taken by frost.' The fruit is large, oval truncate, greenish-yellow, flesh yellow, mild sub-acid, and of excellent quality. -- W.W. Meech, 1908. Van Deman is a complete candidate for pomological honors from Luther Burbank, Santa Rosa, California. Its value remains to be determined, although it has already found favor in some regions. The variety is described as follows, from trees on the grounds of the New York Agricultural Experiment Station, Geneva, New York: Tree vigorous, hardy, prolific, coming in bearing early. Fruit ripens just before Orange; very large, pear-shaped with a short, obtuse neck, making the shape obtuse-pyriform; surface smooth; basin of medium width and depth; stem set obliquely in a shallow calyx, sometimes surrounded by a short, neck-like protuberance; calyx open, with leaf-like lobes; color pale orange; without much pubescence; flesh pale yellow, rather coarse, slightly astringent, aromatic, pleasant, subacid, juicy, becomes deep red when cooked; quality very good; core large, wide open. -- U.P. Hedrick, Cyclopaedia of Hardy Fruits, 1922.

The following were developed by Herb Kaprielian, Dinuba, California, United States. Donated by Oregon Exotica Nursery, 1065 Messinger, Grants Pass, Oregon 97527, United States. Received 04/02/1993.

PI 655047. *Cydonia oblonga* Mill.

Cultivar. "Cooke's Jumbo"; CCYD 90. Pedigree - No data. Selected by Herb Kaprielian, Dinuba, California. One tree in his orchard of Van Deman Quince consistently bore larger fruit than the other trees. Introduced by L.E. Cooke Nursery, Visalia, California in 1972. Fruit: pyriform, large to very large, 12-15 cm diam.; skin yellowish-green; flesh white; ripens in September and October. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were donated by C.T. Kennedy, California Rare Fruit Growers, 1315 33rd Ave., San Francisco, California 94122, United States. Received 03/06/1996.

PI 655048. *Cydonia oblonga* Mill.

Cultivar. "Gamboa"; CCYD 91. Gamboa: Fruit pear-shaped, bright yellow; flesh yellowish-white, turning purple-red on cooking, flavour sweeter than most. Tree small, very dense, originated in Portugal. -- from: <http://www.agroforestry.co.uk/ansample.html>.

PI 655049. *Cydonia oblonga* Mill.

Cultivar. "Tencara Pink"; CCYD 93.

PI 655050. *Pseudocydonia sinensis* (Thouin) C. K. Schneid.

Uncertain. "Chinese"; *Pseudocydonia sinensis*; CCYD 95. Collected in California, United States. Elevation 0 m. Developed in United States.

The following were donated by Euro Nursery & Vineyard (West) Inc., 8801 Saanich Road East, Building 101, Sidney, British Columbia V8L 1H3, Canada. Received 09/10/1997.

PI 655051. *Cydonia oblonga* Mill.

Cultivar. "Le Borgeot"; Q1111-03; CCYD 97. Collected in France. Elevation 0 m. 'De Bourgeat' or 'Borgeat' - Little is known of this quince except that for a quarter of a century it has been listed in the catalogs of several nurserymen. It seems to have been introduced from France about 1885 by J.W. Adams & Co., Springfield, Massachusetts. This following brief description of the variety is recorded at the New York Agricultural Experiment Station: Tree large, vigorous, healthy. Leaves large. Fruit late, medium in size, round with a short neck, ribbed, regular in outline; stem set obliquely in a very shallow, russeted cavity; basin very broad, abrupt, furrowed, deep; calyx small, open; color greenish-yellow; flesh yellow, juicy, mild subacid; quality good. -- U.P. Hedrick, *Cyclopedia of Hardy Fruits*, 1922.

The following were donated by C.T. Kennedy, California Rare Fruit Growers, 1315 33rd Ave., San Francisco, California 94122, United States. Received 03/20/1998.

PI 655052. *Cydonia oblonga* Mill.

Cultivated. CCYD 98; Karp's Sweet Quince. Grown in the Majes Valley in the province of Arequipa in southern Peru. C. T. Kennedy of the California Rare Fruit Growers received this from David Karp of Venice, California, who says it is called 'Apple Quince' in Peru. It is juicy and non-astringent and can be eaten fresh. Karp obtained scions from Edgar Valdivia who grows this quince in Simi Valley California, and whose relatives had brought the cultivar from Peru. The Valle de Majes is a fertile valley between 200 and 800 meter above sea level with a warm climate year round.

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 655053. *Cydonia oblonga* Mill.

Cultivar. "Seghani"; CCYD 118. Collected in Armenia. Elevation 837 m. Near the town of Haykashen in the Armavir Marz. Pedigree - Open pollinated seeds of cultivar Seghani. Seghani - This variety has been bred by H. Gabrielyan-Beketovskaya through free pollination of 2 local Meghre varieties; cultivated in Armenia. The tree bears abundant crop; it is of vigorous growth with wide-rounded foliage; branches hanging down; bearing in 2 years after planting. Fruits are of medium and large size (200 - 320 g), apple shape, slightly narrowing to the base and to the top. Surface is ribbed. Skin is thin and smooth; pulp is juicy; sweet-sour; without tartness, comprising 9.47% sugars, 0.8% acids, 0.1% tannins; almost free of any granulation. Fruits are of middle ripening; they store well. Estimation for fresh eating (4.4 to 5 grades), for processing-jelly (4.4 grades), compote (-3.6 grades). --collection notes

sent by Samvel Gasparian on wild and cultivated fruits of Armenia, Ministry of Agriculture, Republic of Armenia, 2002. Received at NCGR as open pollinated seeds of Seghani.

PI 655054. *Cydonia oblonga* Mill.

Cultivar. "Alema"; CCYD 119. Collected in Armenia. Elevation 932 m. Near the town of Vedi in the Ararat Marz. Pedigree - Open pollinated seeds of cultivar Alema. Alema - This variety has been bred by H. Gabrielyan-Beketovskaya through interbreeding of local varieties 'Yerevani-12' x 'Anush'. Grown in Armenia. The trees are hardy to frosts; bearing well; early bearing (bears in the 2nd year after planting). Foliage is counter pyramid shape with average density. Fruits are of medium and large size, weighing 250-320 g., pear shape with flat surface. Skin is thin, smooth, flat, shiny, slightly waxy, golden yellow. Pulp is creamy, fleshy, dense, juicy, sour, tart free, with strong aroma, without granulation; it comprises 11.2% sugars, 1.4% acids, 0.2% tannins. Fruits are very nice looking; they are stored well (until June). Estimation for fresh eating (dessert 4.43 grades); jelly (3.7 grades), compote (4 grades). --collection notes sent by Samvel Gasparian on wild and cultivated fruits of Armenia, Ministry of Agriculture, Republic of Armenia, 2002. Received at NCGR as open pollinated seeds of Alema.

PI 655055. *Cydonia oblonga* Mill.

Cultivar. "Arakseni"; CCYD 120. Araxeni (Arakseni) is a hybrid, bred by H. Gabrielyan-Beketovskaya through free pollination of local varieties Arevik, introduced from the region of Megri. Grown in Armenia. Foliage is widely spread with hanging branches. The tree bears in 2-3 years after planting. Fruits are of small and medium size, with strongly ribbed surface. Skin is thin, thick, with rare hypodermal spots, slightly shaggy. Pulp is fleshy with light creamy color; it is very thin; sweet (9.8% sugar), pleasant acidity (0.7% acid); it has strong aroma and very little granulation. Fruits are flavored. Estimation for fresh table use (4.5 grades) and for processing (4 grades). --collection notes sent by Samvel Gasparian on wild and cultivated fruits of Armenia, Ministry of Agriculture, Republic of Armenia, 2002. Received at NCGR as open pollinated seeds of Arakseni.

The following were donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 03/10/2003.

PI 655056. *Cydonia oblonga* Mill.

Cultivar. Trentholm; CCYD 123. According to Joanie Cooper of the Home Orchard Society, the scions came indirectly from Catherine and Joseph Brocard of Sweet Home, Oregon. According to Catherine Brocard in a telephone conversation on 3/18/03, this quince came from the late Bud Trentholm, of Irish Bend, Oregon. The original tree is probably still growing on Mr. Trentholm's property, near the confluence of the Long Tom and Willamette Rivers. This is a large fruited, good quality, pear-shaped quince. The Brocards have no trouble selling all the fruit they can pick at farmers markets locally and in Portland. This may be an old American cultivar whose identity has been lost over time.

The following were donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Annie Black, Hidden Springs Nursery, 170 Hidden Springs Lane, Cookeville, Tennessee 38501, United States. Received 03/10/2003.

PI 655057. *Cydonia oblonga* Mill.

Cultivar. "Meech's Prolific"; Meech; CCYD 124. Origin in Connecticut about 1850 where it was grown as Orange. May be a strain of Champion. Grown in Vineland, New Jersey in the mid-1800s. Introduced in 1883 by Rev. W.W. Meech. Fruit: large, pyriform, up to 54 g (18 oz.), skin very fine textured, bright yellow, exceedingly fragrant, excellent flavor, ripens 2 weeks earlier than Champion. Tree: slow growing, heavy and annual bearing; precocious. -- Brooks and Olmo Register of New Fruit Varieties. 'Meech' or 'Meech's Prolific' - Many pomologists believe Meech to be a strain of the better-known Champion. A review of the history and characters of the two varieties shows that Meech is the older of the two quinces; ripens its crop two weeks earlier; is much less subject to blight; the trees are hardier, more vigorous, and more productive; and, all in all, the true Meech is a better variety than the true Champion. It would be difficult indeed to make sure now of getting the variety true to name. Meech seems to have been in cultivation in Vineland, New Jersey, about the middle of the nineteenth century. It was not introduced until some years later, when, coming into the hands of Rev. W.W. Meech, it was disseminated in 1883. Tree very vigorous, hardy, productive and comparatively free from blight; comes in bearing early. Leaves large, broad in proportion to their length and luxuriantly green. Flowers very large and attractive. Fruit mid-season, very large, pear-shaped or obscurely pyriform, smooth or occasionally slightly ribbed; stem set obliquely in a slight depression; basin rather narrow, smooth or somewhat furrowed; color bright golden-yellow; very pubescent but becoming smooth at maturity; flesh yellowish-white, juicy, fine-grained, highly aromatic, tart; quality good. -- U.P. Hedrick, *Cyclopedia of Hardy Fruits*, 1922.

The following were donated by Jim Gilbert, Northwoods Wholesale Nursery, 28696 S. Cramer Road, Molalla, Oregon 97038, United States. Received 03/31/2003.

PI 655058. *Cydonia oblonga* Mill.

Cultivar. "Krymskaya"; CCYD 125.

The following were donated by Svetoslav Bobev, Agricultural University, Department of Phytopathology, Mendeleev 12, Plovdiv, Bulgaria. Received 02/07/2008.

PI 655059. *Cydonia oblonga* Mill.

Cultivar. IV-36 O.P.; CCYD 147. Collected 10/2007 in Bulgaria.

The following were collected by Craig S. Smith, Southeast Environmental Reserach Center, Florida International University, University Park, OE 148, Miami, Florida 33199, United States; Hillary Cooley, Southeast Environmental Reserach Center, Florida International University, University Park, OE 148, Miami, Florida 33199, United States. Received 05/14/2004.

PI 655060. *Ipomoea microdactyla* Griseb.

Wild. Grif 15953. Collected 05/2004 in Florida, United States. Latitude 25° 23' 57" N. Longitude 80° 37' 59" W. Long Pine Key, Florida - Block J.1.

The following were donated by J. Brad Morris, USDA, ARS, Plant Genetic Resources Conservation Unit, 1109 Experiment Street, Griffin, Georgia 30223-1797, United States. Received 2005.

PI 655061. *Sesamum indicum* L.

Uncertain.

PI 655062. *Sesamum indicum* L.

Uncertain. 8724.

PI 655063. *Sesamum indicum* L.

Uncertain.

The following were developed by Judy A. Thies, USDA, ARS, U. S. Vegetable Laboratory, 2700 Savannah Highway, Charleston, South Carolina 29414-5334, United States; Richard L. Fery, USDA, ARS, U.S. Vegetable Laboratory, 2700 Savannah Highway, Charleston, South Carolina 29414-5334, United States. Received 02/19/1998.

PI 655064. *Capsicum chinense* Jacq.

Cultivated. PA-353. Pedigree - Originated from bulk population of individual heirloom cultigen obtained via listing in the Seed Savers Yearbook (Seed Savers Exchange, 1993). Cultigen identification of the original population from which PA-353 was selected was Red Habanero. Released 04/21/1997. Scotch Bonnet-type pepper released to provide superior source of resistance to the southern root-knot nematode [*Meloidogyne incognita* (Kofoid & White) Chitwood]. Small erect growth habit producing bonnet-shaped fruits with three locules; produce 40 or more fruits; a typical fruit is 3.5 cm long and 6.0 cm wide, and matures to a bright red color. Exhibited high level of resistance to southern root-knot nematode in greenhouse and field studies. Recommended for use in plant breeding programs to develop root-knot nematode resistant Scotch Bonnet type cultivars. Potentially valuable as a source of resistance for development of root-knot nematode resistant Habanero peppers.

PI 655065. *Capsicum chinense* Jacq.

Cultivated. PA-398. Pedigree - Originated from bulk population of individual heirloom cultigen obtained via listing in the Seed Savers Yearbook (Seed Savers Exchange, 1993). Cultigen identification of the original population from which PA-398 was selected was Jamaica Scotch Bonnet. Released 04/21/1997. Scotch Bonnet-type pepper released to provide superior source of resistance to the southern root-knot nematode [*Meloidogyne incognita* (Kofoid & White) Chitwood]. Small erect growth habit producing bonnet-shaped fruits with three locules; produce 35 or more fruits; a typical fruit is 3.5 cm long and 6.0 cm wide, and matures to a bright yellow color. Exhibited high level of resistance to southern root-knot nematode in greenhouse and field studies. Recommended for use in plant breeding programs to develop

root-knot nematode resistant Scotch Bonnet type cultivars. Potentially valuable as a source of resistance for development of root-knot nematode resistant Haberno peppers.

The following were collected by USDA- Natural Resources Conservation Service, Plant Materials Center, 21001 North Elliot Road, Lockeford, California 95237-0068, United States. Developed by USDA- Natural Resources Conservation Service, Plant Materials Center, 21001 North Elliot Road, Lockeford, California 95237-0068, United States. Donated by Christina Smith, USDA- Natural Resources Conservation Service, Plant Materials Center, 21001 N. Elliot Road, Lockeford, California 95237-0068, United States. Received 10/20/2008.

PI 655066. *Bromus carinatus* Hook. & Arn.

Cultivar. "Southern Cal 1000 Germplasm California b"; 9083077; W6 33468. Collected 2006 in California, United States. Latitude 33° 45' 7" N. Longitude 117° 43' 25" W. Elevation 303 m. Accession 9083077 was collected in 2006 from native plants located at Irvine Ranch in Orange County at 33° 45.117 N. latitude and 117° 43.417 W. longitude (MLRA 19d). It was growing in silty clay soils on a 40% slope with east exposure. Collection site elevation was 303 meters (994 feet) with an average annual precipitation of 33 centimeters (13 inches). Southern Cal 1000 Germplasm California brome is a native, cool-season, short-lived perennial bunchgrass. The base of this robust plant is open with hairy sheaths having erect stems (culms) growing up to 110 centimeters in height. Leaf blades are 0.5 to 1cm wide, lax, and spread out along stems. The inflorescence (seed head, open panicle) is 10-30 cm long, large, open, and erect to somewhat drooping. The spikelets are 5 to 7 flowered, 2 to 4 cm long, 5 to 7 mm wide and flattened. Lemmas are 1 to 1.5 cm long, flattened, keeled, and usually pubescent. The awns are 2 to 5 mm long. Seeds mature in May and June. The root system is fibrous, deep and widespread.

PI 655067. *Bromus carinatus* Hook. & Arn.

Cultivar. "Central Coast 2600 Germplasm Cal. brome"; 9083079; W6 33469. Collected 2006 in California, United States. Latitude 34° 44' 33" N. Longitude 120° 1' 4" W. Elevation 814 m. Accession 9083079 was collected in 2006 from native plants located at Figueroa Mountain in Santa Barbara County at 34° 44.551 N. latitude and 120° 01.058 W. longitude (MLRA 20). It was growing in sandy clay soils on a 18% slope with north exposure. Collection site elevation was 814 meters (2,670 feet) with an average annual precipitation of 45 centimeters (18 inches). Central Coast 2600 Germplasm California brome is a native, cool-season, short-lived perennial bunchgrass. The base of this robust plant is open with hairy sheaths having erect stems (culms) growing up to 110 centimeters in height. Leaf blades are 0.5 to 1cm wide, lax, and spread out along stems. The inflorescence (seed head, open panicle) is 10-30 cm long, large, open, and erect to somewhat drooping. The spikelets are 5 to 7 flowered, 2 to 4 cm long, 5 to 7 mm wide and flattened. Lemmas are 1 to 1.5 cm long, flattened, keeled, and usually pubescent. The awns are 2 to 5 mm long. Seeds mature in May and June. The root system is fibrous, deep and widespread.

PI 655068. *Bromus carinatus* Hook. & Arn.

Cultivar. "Coastal 500 Germplasm Cal. brome"; 9083080; W6 33470. Collected 2006 in California, United States. Latitude 35° 18' 47" N.

Longitude 120° 39' 1" W. Elevation 152 m. : Accession 9083080 was collected in 2006 from native plants located near Cal Poly Canyon in San Luis Obispo County at 35° 18.768 N. latitude and 120° 39.021 W. longitude (MLRA 14). It was growing in sandy clay loam soils on a 10% slope with north exposure. Collection site elevation was 152 meters (500 feet) with an average annual precipitation of 58 centimeters (23 inches). Coastal 500 Germplasm California brome is a native, cool-season, short-lived perennial bunchgrass. The base of this robust plant is open with hairy sheaths having erect stems (culms) growing up to 110 centimeters in height. Leaf blades are 0.5 to 1cm wide, lax, and spread out along stems. The inflorescence (seed head, open panicle) is 10-30 cm long, large, open, and erect to somewhat drooping. The spikelets are 5 to 7 flowered, 2 to 4 cm long, 5 to 7 mm wide and flattened. Lemmas are 1 to 1.5 cm long, flattened, keeled, and usually pubescent. The awns are 2 to 5 mm long. Seeds mature in May and June. The root system is fibrous, deep and widespread.

PI 655069. *Bromus carinatus* Hook. & Arn.

Cultivar. "Northern Cal 40 Germplasm Cal. brome"; 9083087; W6 33471. Collected 2006 in California, United States. Latitude 38° 0' 40" N. Longitude 122° 21' 58" W. Elevation 12 m. Accession 9083087 was collected in 2006 from native plants located at Point Pinole in Contra Costa County at 38° 00.656 N. latitude and 122° 21.971 W. longitude (MLRA 14). It was growing in silty clay loam soils on a 2% slope with west exposure. Collection site elevation was 12 meters (40 feet) with an average annual precipitation of 48 centimeters (19 inches). Northern Cal 40 Germplasm California brome is a native, cool-season, short-lived perennial bunchgrass. The base of this robust plant is open with hairy sheaths having erect stems (culms) growing up to 110 centimeters in height. Leaf blades are 0.5 to 1cm wide, lax, and spread out along stems. The inflorescence (seed head, open panicle) is 10-30 cm long, large, open, and erect to somewhat drooping. The spikelets are 5 to 7 flowered, 2 to 4 cm long, 5 to 7 mm wide and flattened. Lemmas are 1 to 1.5 cm long, flattened, keeled, and usually pubescent. The awns are 2 to 5 mm long. Seeds mature in May and June. The root system is fibrous, deep and widespread.

PI 655070. *Bromus carinatus* Hook. & Arn.

Cultivar. "Central Sierra 3200 Germplasm Cal. brome"; 9083095; W6 33472. Collected 2006 in California, United States. Latitude 39° 29' 32" N. Longitude 121° 12' 55" W. Elevation 975 m. Accession 9083095 was collected in 2006 from native plants located at Pike County Peak in Yuba County at 39° 29.526 N. latitude and 121° 12.916 W. longitude (MLRA 18d). It was growing in silty clay soils on a 10% slope with south exposure. Collection site elevation was 975 meters (3,200 feet) with an average annual precipitation of 147 centimeters (58 inches). Central Sierra 3200 Germplasm California brome is a native, cool-season, short-lived perennial bunchgrass. The base of this robust plant is open with hairy sheaths having erect stems (culms) growing up to 110 centimeters in height. Leaf blades are 0.5 to 1cm wide, lax, and spread out along stems. The inflorescence (seed head, open panicle) is 10-30 cm long, large, open, and erect to somewhat drooping. The spikelets are 5 to 7 flowered, 2 to 4 cm long, 5 to 7 mm wide and flattened. Lemmas are 1 to 1.5 cm long, flattened, keeled, and usually pubescent. The awns are 2 to 5 mm long. Seeds mature in May and June. The root system is fibrous, deep and widespread.

The following were developed by Patricia E. Juskiw, Alberta Agriculture, Field Crop Development Centre, 5030-50 St., Lacombe, Alberta T4L 1W8, Canada. Received 10/20/2008.

PI 655071. *Hordeum vulgare* L. subsp. *vulgare*

Cultivar. Pureline. "BENTLEY". Pedigree - Where I92125 was an introduction to FCDC from the North Dakota State University two-row barley breeding program of Jerry Franckowiak, and was the cross C2-89-86, a selection from the cross ND10419/ND11231. ND10419 was a selection from the cross Harrington//ND4758/M37/3/Bowman/4/ND5835//ND4046/ND2199/3/Bowman. ND11231 was a selection from the cross ND7556//ND7085/Bowman sib. TR229 was developed from the cross AC Oxbow/Manley (TR226/TR490). Bentley is a two-rowed, hulled, malting barley. Bentley has rough awns. It has purplish coloured auricles. Its spike is semi-compact, medium in length with a semi-erect attitude. The kernel has a mid-long rachilla with mid-long rachilla hairs. It has a colorless (yellow/white) aleurone. In the Prairie Recommending Committee for Oat and Barley (PRCOB) Two-row Cooperative Tests in 2005 and 2006, Bentley had an average kernel plumpness of 92%. Its kernel weight was 48 mg. Its test weight was 64 kg hL-1. Its grain yield was 6064 kg ha-1. Its days to head were 60d. Its maturity was 93 d. Its height was 87.7 cm, its lodging score (1-9 scale) was 3.8. In the PRCOB Forage Barley Cooperative Tests in 2005 and 2006, its dry matter yields were 11270 kg ha-1. Its average acid detergent fibre (ADF) content was 35.5%. Its average neutral detergent fibre (NDF) content was 54.4%. The Disease Evaluation Team of the PRCOB rated Bentley as moderately resistant to the surface-borne smuts (caused by *Ustilago* spp.) but moderately susceptible to true loose smut [caused by *U. nuda* (Jens.) Rostr.]. Bentley was rated as resistant to the spot form of net blotch (caused by *Pyrenophora teres* Dreschs. forma *maculata*) but moderately susceptible to the net form (*P. teres* forma *teres*). Bentley was rated as moderately resistant to spot blotch [caused by *Cochliobolus sativus* (Ito and Kuribayashi) Dreschs. Ex Dastur]. Bentley was rated as moderately resistant/moderately susceptible to *Fusarium* head blight (scab) {predominantly caused by *Fusarium graminearum* Schwabe [telemorph *Gibberella zeae* (Schwein.) Petch], common root rot, and stem rust (caused by *Puccinia graminis* Pers. f.sp. *tritici* Erikss. and Henn.). Bentley was rated as susceptible to scald [caused by *Rhynchosporium secalis* (Oudem.) J.J. Davis], septoria or speckled leaf blotch (caused by *Septoria passerinii* Sacc.), and Barley Yellow Dwarf.

The following were developed by Joseph M. Nyachiro, Alberta Agriculture, Food & Rural Development, Field Crop Development Centre, Lacombe, Alberta T4L 1W8, Canada. Received 10/20/2008.

PI 655072. *Hordeum vulgare* L. subsp. *vulgare*

Cultivar. Pureline. "CHIGWELL". Pedigree - Chigwell = Mahigan/H870005: Chigwell (H98075009) is from the cross: Mahigan/H8700. Mahigan = Celaya//Mesquite/Godiva/3/Trompillo [PI 605699] is a six-rowed barley from FCDC. Mahigan was derived from a single semi-smooth awned variant spike selection of the early-maturing variety Kasota [PI 592378]. The FCDC line H87020005 is derived from H86014/H86009. The line H86014 was derived from the cross of Leduc /H75326012 [Leduc = PI 592799], and H86009 is derived from the cross of variety Noble [PI 511390]. Chigwell (Canadian Food Inspection Agency [CFIA]) Reg. No. 6488 is a

hulled, six-rowed, smooth-awned spring feed barley (*Hordeum vulgare* L.). Chigwell was tested in FCDC field trials from 2003 to 2007 as H98075009, as BT 577 in Western Cooperative Six Row Barley Test, and as FB 418 in the Western Cooperative Forage Barley Test in 2006 and 2007. Chigwell was developed and released by the Alberta Agriculture and Rural Development (AARD) at the Field Crop Development Centre (FCDC), Lacombe, AB, Canada. Chigwell takes an average of 55 d to heading and 86 d to maturity. Chigwell has an average height of 86 cm and a lodging score of 3 on a 1 (no lodging) to 9 (100% lodging) scale. Chigwell has an average grain of 39 g 1000kwt, 61 g test wt. and 76% plumpness. Chigwell has a grain yield potential ranging between 3891 and 8192 kg ha⁻¹ depending on environment and has a dry matter silage yield potential of 13206 kg ha⁻¹. Chigwell has resistance to covered smut [*Ustilago hordei* (Pers.) Lagerh.], false loose smut (caused by *U. nigra* Tapke) and is moderately susceptible to loose smut [*U. nuda* ((Jensen) Kellerman & Swingle)]. Chigwell is moderately resistant to scald [*Rhynchosporium secalis* (Oud.) Davis], spot blotch [*Cochliobolus sativus* (Ito & Kuribayashi) Drechs. Ex Dastur] and spot-form of net blotch (*Pyrenophora teres* f. *maculate* Smedeg.). Like most six-rowed commercial cultivars, Chigwell is susceptible to common root rot (*C. sativus*), FHB (caused by *Fusarium graminearum* Schwabe) and speckled leaf blotch (*Septoria passerinii* Sacc.). Chigwell exhibited a moderately an intermediate resistant/susceptible reaction to non-QCC races of stem rust (*Puccinia graminis* Pers.; Pers. f. sp. *tritici* and f. sp. *secalis* Eriks. & E. Henn).

The following were developed by Dennis Cash, Montana State University, Animal & Range Sciences Department, 235 Linfield Hall, Bozeman, Montana 59717-3120, United States. Received 10/16/2008.

PI 655073. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "WILLOW CREEK". Pedigree - Selected directly from 'Lunnija 56' (PI 306505) following two cycles of headrow selection for uniformity in plant height, heading date color and head color. Cold tolerant, late-maturing and awnletted cultivar of hard red winter wheat. Over 120 cm. tall. Released based on its suitability and performance as a forage crop. In forage trials, is superior to forage barley and other spring cereals, and similar to available winter cultivars of awnletted triticale. Forage quality and animal feeding performance are good, slightly inferior to forage barley. Grain yield and cereal quality of Willow Creek are inferior to most modern adapted winter wheat cultivars.

The following were developed by Louisiana State University, Baton Rouge, Louisiana, United States. Received 10/17/2008.

PI 655074 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. "AGS 2060". PVP 200800412.

The following were donated by A. Van / Elseleen Luyk / Wieten, HZPC Holland BV, Randweg 25, Postbus 99, Emmeloord, Netherlands. Received 09/05/2001.

PI 655075 PVPO. *Solanum tuberosum* L.

Cultivar. "Red Scarlett"; AL 349 A; Q 43549. PVP 200300189.

The following were developed by HZPC Holland B.V., Canada. Received 10/22/2008.

PI 655076 PVPO. *Solanum tuberosum* L.
Cultivar. "RODEO". PVP 200300190.

The following were developed by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Cynthia M. Ocamb, Oregon State University, Department of Botany & Plant Pathology, 2082 Cordley Hall, Corvallis, Oregon 97331-2902, United States; Walter Mahaffee, USDA-ARS-HCRL, 3420 NW Orchard, Corvallis, Oregon 97331, United States; Jodi Smith, Oregon State University, Department of Horticulture, ALS 4017, Corvallis, Oregon 97333, United States; David H. Gent, USDA-ARS-NFSPRC, 3450 SW Campus Way, Corvallis, Oregon 97331, United States. Donated by Jodi Smith, Oregon State University, Department of Horticulture, ALS 4017, Corvallis, Oregon 97333, United States. Received 09/10/2005.

PI 655077. *Humulus lupulus* L. var. *lupulus*
Cultivar. "Kazak 2000"; CHUM 1592. Pedigree - F1 from PI 635262 (CHUM 1025.007).

The following were donated by John D. Berdahl, USDA-ARS, Northern Great Plains Research Lab., P.O. Box 459, Mandan, North Dakota 58554, United States. Received 02/08/1990.

PI 655078. *Pascopyrum smithii* (Rydb.) Barkworth & D. R. Dewey
Wild. 672; W6 3296. Collected 1979 in South Dakota, United States.
Elevation 502 m. Tripp County. LD: SWSW36 103N 77W.

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 01/30/1992.

PI 655079. *Elymus* sp.
Wild. D-3538; H-4090; W6 10612. Collected in Pakistan. Gilgit, Babusar.
Seed Increased: C-46-61--75 (1991).

PI 655080. *Elymus schrenkianus* (Fisch. & C. A. Mey.) Tzvelev
Wild. D-3781; Y1088; W6 10637. Collected 09/10/1988 in Xizang, China.
Elevation 4500 m. Alpine meadow, slopes of Yaduidang Mt., Nedong. Seed
Increased: MB-103-41--50 (1991).

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 655081. *Pseudoroegneria geniculata*** (Trin.) A. Love
Wild. DJ-3942; MB-84-71-80; W6 14060. Collected 08/13/1989 in Uzbekistan. Elevation 930 m. Dry rocky slope, side canyon to left of Hwy M-52 at 667km marker between Cheketeman Pass and Aktash, 1 km beyond the Cheketeman camp, Gorno Altay A.O. Spikes light-bronze, rather dense. Awns short.
- PI 655082. *Pseudoroegneria geniculata*** (Trin.) A. Love
Wild. DJ-3968; MB-83-51-60; W6 14064. Collected 08/14/1989 in Uzbekistan. Elevation 1340 m. Dry hillside on outskirts of Aktash, Gorno Altay A.O. Awnless.
- PI 655083. *Elymus gmelinii*** (Ledeb.) Tzvelev
Wild. DJ-3858; MB-111-31-40 1991; W6 14367. Collected 08/01/1989 in Russian Federation. Elevation 780 m. 546km marker on highway M-52 beyond Cherga toward Shebalino (Gorno Altay A.O.). Typical.
- PI 655084. *Elymus sibiricus*** L.
Wild. DJ-3892; MB-92-51-60 1991; W6 14373. Collected 08/12/1989 in Russian Federation. Elevation 1090 m. Shaded moist slope on mountainside opposite the Cheketeman camp (located on the Ilgumen stream at south side of Cheketeman Pass near the 666km marker on highway M-52, Gorno Altay A.O.). Spikelets mostly single.

The following were donated by James C. Read, Texas A&M University, Texas Agricultural Experiment Station, Research and Extension Center, Dallas, Texas 75252-6502, United States. Received 1997.

- PI 655085. *Poa arachnifera*** Torr.
Wild. TX ISO 2; TBPC 6-88; TBPC 5-88; TBPC 8-88; TBPC 9-88; W6 17720. Collected in Texas, United States. Composite from Jack, Palo Pinto and Eastland county Texas.
- PI 655086. *Poa arachnifera*** Torr.
Wild. TX ISO 3; TBPC 11-88; TBPC 10-88; W6 17721. Collected in Texas, United States. Erath county Texas.
- PI 655087. *Poa arachnifera*** Torr.
Wild. TX ISO 4; TBPC 15-88; TBPC 12-88; TBPC 13-88; TBPC 14-88; TBPC 16-88; TBPC 17-88; W6 17722. Collected in Texas, United States. Composite from Coryell, Freestone and Mills county Texas.
- PI 655088. *Poa arachnifera*** Torr.
Wild. TX ISO 5; TBPC 3-88; TBPC 2-88; W6 17723. Collected in Texas, United States. Dallas county Texas.
- PI 655089. *Poa arachnifera*** Torr.
Wild. TX ISO 6; TBPC 22-88; TBPC 21-88; TBPC 23-88; W6 17724. Collected in Texas, United States. Composite from Shackelford and Wilbarger county Texas.

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 655090. *Agrostis mongolica*** Roshev.
Wild. W94150; W6 18291. Collected 09/1994 in Mongolia. Latitude 47° 24' 26" N. Longitude 106° 26' 33" E. Elevation 1692 m. About 68 km SW of Ulaanbaatar. In dry stream bed 0.5 km from main road on east side. Mountain steppe. 2% W slope.
- PI 655091. *Leymus paboanus*** (Claus) Pilg.
Wild. 96S-116; W6 19629. Collected 09/1996 in Mongolia. Latitude 49° 55' 1" N. Longitude 92° 39' 26" E. Elevation 860 m. Uvs Aimag, Narnabulag Sum, Ulaanboorog, adjacent to Uvs Noer (lake). 1% north slope. Old prehistoric lake bed of Uvs Noer that is covered with alluvial materials. Soils are coarse gravels with voids filled with coarse brown sand. DOMINANT VEG: *Ceratoides papposa*/*Elymus poboanus* + *Achnatherum splendens*, *Elymus chinensis*, *Stipa capillata*, *Artemisia frigida*.
- PI 655092. *Elymus sibiricus*** L.
Wild. 96S-140; W6 19650. Collected 09/1996 in Mongolia. Latitude 49° 47' 52" N. Longitude 94° 57' 52" E. Elevation 1370 m. Uvs Aimag, Zuun-Gobi Sum, Olongot Bag. 1% to 3% southeast slope. Gently rolling hills with occasional rock outcrop on hill crest. Ecological zone is forest steppe. Soils are coarse brown sandy soils. DOMINANT VEG: *Artemisia*/*Stipa* + *Agropyron cristatum*, *Bromus inermis*, *Caragana*, *Poa* spp.
- PI 655093. *Elymus dahuricus*** Turcz. ex Griseb.
Wild. 96N-272; W6 19758. Collected 08/1996 in Mongolia. Latitude 49° 45' 11" N. Longitude 94° 11' 44" E. Elevation 1201 m. Uvs Aimag, 17 km northwest of Beruunturuun and 28 km southeast of Bay An Nuur. Large flat area of abandoned wheat fields along the road. Soils are tan and appear well drained. Aspect is essentially flat. DOMINANT VEG: *Leymus chinensis*, *Elymus dahuricus*, *Setaria*, *Chenopodium* ECOLOGICAL ZONE: Steppe.
- PI 655094. *Agropyron cristatum*** (L.) Gaertn.
Wild. 96N-305; W6 19783. Collected 09/1996 in Mongolia. Latitude 50° 10' 32" N. Longitude 91° 31' 57" E. Elevation 1601 m. Uvs Aimag, 28 km from Ulaangom on the north side of the road from Ulaangom to Uureg Nuur. 50% to 80% slope. Rocky draw with steep sides running south with major rock projections. Soils are rocky. DOMINANT VEG: *Caragana bungei*, *Agropyron cristatum*, *Koeleria cristatum*, *Festuca lenensis*, *Artemisia frigida*, *Potentilla acaulis*, *Kochia prostrata*, *Carex pediformis*, *Thymus daharius* ECOLOGICAL ZONE: Mountain Steppe.
- PI 655095. *Elymus sibiricus*** L.
Wild. 96N-318; W6 19795. Collected 09/1996 in Mongolia. Latitude 49° 39' 29" N. Longitude 90° 16' 31" E. Elevation 1509 m. Uvs Aimag, west bank of medium-sized creek about 1 km southwest of Bayshint. Flat less than 1% east slope. Creek bottom is mostly alluvial gravel with thin, sandy, saline soil. Heavily grazed site. DOMINANT VEG: *Elymus dahuricus*, *Potentilla anserina*, *Ranunculus acer*, *Equisetum fluviatila*, *Elymus sibiricus*, *Iris bungei*, *Agrostis clavata* ECOLOGICAL ZONE: Mountain steppe.
- PI 655096. *Elymus dahuricus*** Turcz. ex Griseb.
Wild. 96N-338; W6 19813. Collected 09/1996 in Mongolia. Latitude 48°

52' 40" N. Longitude 89° 39' 44" E. Elevation 1817 m. Bayan-Olgii Aimag, 3.5 km south of Uujim Sum Center on a wide valley flat where the valley begins to rise to the mountains. 2% to 3% north-northeast slope. Soils are a fine white silt and some rocks/gravel are present. Fenced site used for irrigated pasture. DOMINANT VEG: *Elymus sibiricus*, *Elymus dahuricus*, *Poa pratensis*, *Agropyron cristatum*, *Astragalus* sp., *Agrostis clavata* ECOLOGICAL ZONE: Mountain steppe.

PI 655097. *Elymus sibiricus* L.

Wild. 96N-339; W6 19814. Collected 09/1996 in Mongolia. Latitude 48° 52' 40" N. Longitude 89° 39' 44" E. Elevation 1817 m. Bayan-Olgii Aimag, 3.5 km south of Uujim Sum Center on a wide valley flat where the valley begins to rise to the mountains. 2% to 3% north-northeast slope. Soils are a fine white silt and some rocks/gravel are present. Fenced site used for irrigated pasture. DOMINANT VEG: *Elymus sibiricus*, *Elymus dahuricus*, *Poa pratensis*, *Agropyron cristatum*, *Astragalus* sp., *Agrostis clavata* ECOLOGICAL ZONE: Mountain steppe.

PI 655098. *Elymus dahuricus* Turcz. ex Griseb.

Wild. 96N-373; W6 19837. Collected 09/1996 in Mongolia. Latitude 47° 1' 59" N. Longitude 93° 18' 18" E. Elevation 1355 m. Hovd Aimag, an abandoned wheat farm south of the highway from Hovd to Altai city. More than 1% north slope. Site is directly south of the fence in the area previously under a circle irrigation. Soils are small gravel/sandy/silt. DOMINANT VEG: *Crepis tectorum*, *Saussurea amara*, *Salsola salina*, *Medicago falcata*, *Corispermum chinganicum*, *Corispermum declinatum* ECOLOGICAL ZONE: Desert steppe.

PI 655099. *Elymus sibiricus* L.

Wild. 96N-374; W6 19838. Collected 09/1996 in Mongolia. Latitude 47° 1' 59" N. Longitude 93° 18' 18" E. Elevation 1355 m. Hovd Aimag, an abandoned wheat farm south of the highway from Hovd to Altai city. More than 1% north slope. Site is directly south of the fence in the area previously under a circle irrigation. Soils are small gravel/sandy/silt. DOMINANT VEG: *Crepis tectorum*, *Saussurea amara*, *Salsola salina*, *Medicago falcata*, *Corispermum chinganicum*, *Corispermum declinatum* ECOLOGICAL ZONE: Desert 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 655100. *Elymus gmelinii* (Ledeb.) Tzvelev

Wild. X97-024; W6 20217. Collected 08/1997 in Xinjiang, China. Latitude 43° 14' 9" N. Longitude 81° 11' 25" E. Elevation 2370 m. 8 km north Zhaosu Horse Breeding Farm, Xinjiang. High mountain meadow, silt loam, gently rolling landscape, native grassland, will be cut for winter hay, field road running through site. Slope is 2% with northwest aspect.

PI 655101. *Poa pratensis* subsp. *angustifolia* (L.) Dumort.
Wild. X97-025; W6 20218. Collected 08/1997 in Xinjiang, China. Latitude 43° 15' 20" N. Longitude 81° 11' 35" E. Elevation 1950 m. 8 km north Zhaosu Horse Breeding Farm, Xinjiang. High mountain meadow, stoney loam soil with stones ranging in size from pea gravel to 5 cm diameter, native grassland, will be cut for winter hay. Slope is 15% with south aspect.

PI 655102. *Elymus gmelinii* (Ledeb.) Tzvelev
Wild. X97-041; W6 20227. Collected 08/1997 in Xinjiang, China. Latitude 43° 8' 30" N. Longitude 80° 50' 53" E. Elevation 2160 m. 16 km north of Farm No. 77, 38 km west of Zhaosu County, Xinjiang. Mountain meadow, single cutting of hay and not grazed in winter. Silt loam soil. High frequency of forbs. *Trifolium repens* along roadway. Slope is 5% with north aspect.

PI 655103. *Elymus dahuricus* Turcz. ex Griseb.
Wild. X97-078; W6 20251. Collected 08/1997 in Xinjiang, China. Latitude 43° 1' 46" N. Longitude 81° 28' 36" E. Elevation 1020 m. 5 km east of Akedala Farm, 40 km east of Zhaosu County, Xinjiang. Ungrazed meadow, rough furrows, will not be cut for hay. Lush vegetation; may be subirrigated. No slope.

PI 655104. *Festuca arundinacea* Schreb.
Wild. X97-097; W6 20262. Collected 08/1997 in Xinjiang, China. Latitude 43° 9' 52" N. Longitude 81° 37' 12" E. Elevation 1320 m. 40 km east Zhaosu County, Xinjiang. Ungrazed meadow that will be cut for hay. Lush vegetation, silt loam soil. Slope is 2% with southwest aspect. Near Suasu River.

PI 655105. *Elymus gmelinii* (Ledeb.) Tzvelev
Wild. X97-106; W6 20269. 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 655106. *Elymus dahuricus* Turcz. ex Griseb.
Wild. X97-115; W6 20274. 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.

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 655107. *Lolium multiflorum* Lam.
Uncertain. C49; W6 20326. Collected 07/1997 in California, United States. San Gregorio. Two miles from San Gregorio toward La Honda on Highway 84. Grazed. Loam. Slope 0-5%. Open. Seasonally dry.

- PI 655108. *Lolium multiflorum* Lam.**
 Uncertain. C61; W6 20329. Collected 07/1997 in California, United States. Latitude 38° 35' 27" N. Longitude 121° 43' 4" W. Elevation 276 m. Davis. Cropped/grazed area about two miles from Davis. Cultivated. Loam. Slope 0-5%. Open. Seasonally dry.
- PI 655109. *Lolium multiflorum* Lam.**
 Uncertain. C69; W6 20330. Collected 07/1997 in California, United States. Napa. Highway 121-Hagen Rd. intersection, NW side of city.
- PI 655110. *Lolium multiflorum* Lam.**
 Uncertain. C80; W6 20332. Collected 07/1997 in California, United States. Napa Valley. Halfway between Yountville and Napa, west side of valley. Grazed. Loam. Slope 0-5%. Open. Seasonally dry.
- PI 655111. *Lolium multiflorum* Lam.**
 Uncertain. C162; W6 20348. Collected 07/1997 in California, United States. Elevation 0 m. Fifteen miles north of Point Arena. Semi-natural area with *Elymus glaucus*.
- PI 655112. *Festuca arundinacea* Schreb.**
 Uncertain. OR78; W6 20425. Collected 08/1997 in Oregon, United States. Elevation 2 m. Parking area at end of town of Clatsop Spit, northwest Oregon. Sand dune, 5-10% slope, open, seasonally dry.
- PI 655113. *Festuca arundinacea* Schreb.**
 Uncertain. W68; W6 20499. Collected 08/1997 in Washington, United States. Latitude 48° 7' 53" N. Longitude 123° 43' 24" W. Elevation 20 m. East of Joyce in abandoned paddock, once grazed. Loam, 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 655114. *Festuca arundinacea* Schreb.**
 Wild. 93044; W6 20540. Collected 06/1993 in Morocco. Latitude 33° 51' N. Longitude 4° 31' W. Elevation 940 m. 2 km NE El Menzel, 4610 in the province of Sefrou.
- PI 655115. *Festuca arundinacea* Schreb.**
 Wild. 93045; W6 20541. Collected 06/1993 in Morocco. Latitude 33° 49' N. Longitude 4° 41' W. Elevation 680 m. 18 km S Sefrou in the province of Sefrou.
- PI 655116. *Festuca arundinacea* Schreb.**
 Wild. 93053; W6 20547. Collected 06/1993 in Morocco. Latitude 33° 5' N. Longitude 5° 49' W. Elevation 880 m. 25 km N Khenifra, 2615 in the province of Khenifra.

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 655117. *Elymus elymoides* subsp. *brevifolius* (J. G. Sm.) Barkworth
Wild. T-1228; W6 21004. Collected in Utah, United States. Latitude
30° 50' N. Longitude 110° 57' W. Highway 6 10.5 miles southeast
of Soldier Summit near Colton in Carbon County.

PI 655118. *Elymus elymoides* subsp. *brevifolius* (J. G. Sm.) Barkworth
Wild. T-1264; W6 21013. Collected in New Mexico, United States. Latitude
36° 16' N. Longitude 104° 39' W. 1 mile north of Colmor on I-25
in Colfax 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 655119. *Elymus gmelinii* (Ledeb.) Tzvelev
Wild. 98HT-178; W6 21267. 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 655120. *Elymus sibiricus* L.
Wild. 98HT-296; W6 21365. 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 655121. *Bromus inermis* Leyss. subsp. *inermis*
Wild. 98HV-15; W6 21397. 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 655122. *Phleum phleoides* (L.) H. Karst.
Wild. 98HV-25; W6 21407. Collected 09/1998 in Mongolia. Latitude 49°
44' 55" N. Longitude 106° 29' 1" E. Elevation 914 m. Bayankharaat
Sum, Selenge Aimag, west of Yoroo. Sandy, Chestnut, Light brown soil.
Associated vegetation: *Leymus chinensis*, *Sanguisorba officinalis*,
Artemisia dracuncululus, *Bromus inermis*, *Thalictrum minus*, *Pinus*
sylvestris.

PI 655123. *Puccinellia tenuiflora* (Griseb.) Scribn. & Merr.
Wild. 98HV-41; W6 21422. Collected 09/1998 in Mongolia. Latitude 49°

44' 52" N. Longitude 107° 21' 37" E. Elevation 853 m. Huder Sum, Selenge Aimag, 10 km west of Huder. Saline meadow valley depression. Associated vegetation: *Puccinellia tenuiflora*, *Hordeum brevisubulatum*, *Halerpestes sarmentosa*, *Saussurea* sp., *Taraxacum luecantherum*.

PI 655124. *Elymus gmelinii* (Ledeb.) Tzvelev

Wild. 98HV-47; W6 21428. 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 bicaulis*, *Elymus gmelinii*, *Vicia amoena*, *V. unijuga*, *Artemisia sericea*, *Galatella dahurica*, *Hieracium umbellatum*, *Sanguisorba officinalis*.

PI 655125. *Festuca rubra* L.

Wild. 98HV-50; W6 21431. 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 655126. *Elymus gmelinii* (Ledeb.) Tzvelev

Wild. 98HV-53; W6 21434. 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 655127. *Elymus gmelinii* (Ledeb.) Tzvelev

Wild. 98HV-69; W6 21450. 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 umbellatum*, *Bromus inermis*, *Trifolium lupinaster*.

PI 655128. *Phleum phleoides* (L.) H. Karst.

Wild. 98HV-70; W6 21451. 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 umbellatum*, *Bromus inermis*, *Trifolium lupinaster*.

PI 655129. *Stipa sibirica* (L.) Lam.

Wild. 98HV-117; W6 21496. 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*, *Scabiosa comosa*, *Bupleurum scorfioidifolium*, *Thalictrum petaloidium*.

PI 655130. *Poa pratensis* L.

Wild. 98HV-125; W6 21502. Collected 09/1998 in Mongolia. Latitude 48° 54' 50" N. Longitude 103° 20' 48" E. Elevation 1463 m. Bugag Sum, Bulgan Aimag, 18 km NW of Bulgan City. Mid-slope on small knoll with scattered larch (75% harvested), forb-grass-forest (*Larix sibirica*) meadow type, dark chernozem soil. Associated vegetation: *Trisetum sibiricum*, *Bromus pumpellianus*, *Elytrigia gmelinii*, *Elymus excelsus*, *Anemone crinata*, *Chamaenerion angustifolium*, *Frageria orientalis*, *Carex pediformis*, *Larix sibirica*.

PI 655131. *Bromus inermis* Leyss. subsp. *inermis*

Wild. 98HV-143; W6 21518. Collected 09/1998 in Mongolia. Latitude 49° 50' 11" N. Longitude 101° 36' 36" E. Elevation 1524 m. Eguur/Tarialan Sum, Hovsgol Aimag, 45 km NW of Tarialan. Small pass, mountain meadow with scattered larch, forb-grass type, forest grove, light-sandy dark brown soil. Associated vegetation: *Stipa baicalensis*, *Elymus gmelinii*, *Festuca ovina*, *Poa botryoides*, *Agrostis trinii*, *Bromus inermis*, *Carex korshinskii*, *Potentilla tanacetifolia*, *Schizonepeta multiflora*, *Galium vernum*, *Stellaria chamijasme*.

PI 655132. *Bromus inermis* subsp. *pumpellianus* (Scribn.) Wagon

Wild. 98HV-166; W6 21541. Collected 09/1998 in Mongolia. Latitude 50° 10' 28" N. Longitude 101° 4' 20" E. Elevation 1676 m. Eguur Sum, Hovsgol Aimag, 50 km west of Erdenebulgan. Steep toe slope between larch (above) and wet meadow (below), mountain steppe, forb-grass type, light brown soil (rocky). Associated vegetation: *Bromus pumpellianus*, *Leymus chinensis*, *Elymus excelsus*, *Elymus gmelinii*, *Anemone crinata*, *Artemisia vulgaris*, *Sanguisorba officinalis*, *Scabiosa comata*, *Galium vernum*, *Festuca ovina*.

PI 655133. *Poa attenuata* subsp. *botryoides* (Trin. ex Griseb.) Tzvelev

Wild. 98HV-169; W6 21544. Collected 09/1998 in Mongolia. Latitude 50° 10' 28" N. Longitude 101° 4' 20" E. Elevation 1676 m. Eguur Sum, Hovsgol Aimag, 50 km west of Erdenebulgan. Steep toe slope between larch (above) and wet meadow (below), mountain steppe, forb-grass type, light brown soil (rocky). Associated vegetation: *Bromus pumpellianus*, *Leymus chinensis*, *Elymus excelsus*, *Elymus gmelinii*, *Anemone crinata*, *Artemisia vulgaris*, *Sanguisorba officinalis*, *Scabiosa comata*, *Galium vernum*, *Festuca ovina*.

PI 655134. *Poa versicolor* subsp. *stepposa* (Krylov) Tzvelev

Wild. 98HV-210; W6 21583. Collected 09/1998 in Mongolia. Latitude 50° 18' 59" N. Longitude 99° 46' 20" E. Elevation 2073 m. Hovsgol Sum, Hovsgol Aimag, 48 km SW of Hatgal, about 8 km south of Tsagan-Chuluut Phosphate Mine. Open mountain meadow surrounded on three sides by larch forest, mid slope, meadow dark brown soil, *Kobresia-Festuca* mountain steppe. Associated vegetation: *Festuca lenensis*, *Festuca ovina*, *Kobresia bellardii*, *Kobresia sibirica*, *Poa palustris*, *Sanguisorba officinalis*, *Salix* sp., *Pedicularis* sp., *Saussurea schanginiana*, *Gentiana macrophylla*.

The following were collected by Melvin D. Rumbaugh, USDA-ARS, Utah State University, Forage & Range Research Lab, 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 01/21/1992.

PI 655135. *Elymus dahuricus* Turcz. ex Griseb.

Wild. X910078; KJ-318; W6 21663. Collected 09/04/1991 in China. Latitude 43° 18' N. Longitude 86° 40' E. Elevation 1189 m. NO. 24 Farm, 40 km NE of Yanqi County, between Korla and Urumqi.

The following were collected by Peter Gray, Washington State University, Plant Pathology, Johnson Hall, Room 328, Pullman, Washington 99164-6430, United States. Received 11/03/1999.

PI 655136. *Elymus glaucus* Buckley

Wild. W6 22009. Collected 09/21/1999 in Washington, United States. Morning Song hiking trail at Grand Ronde River canyon viewpoint and picnic table. Field Spring State Park, Asotin County, Washington. Many *Elymus glaucus* heads were smutted with *Tilletia elymi* Diet. and Holw. The smutted heads were not included in the seed collected.

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 03/19/1998.

PI 655137. *Elymus elymoides* subsp. *brevifolius* (J. G. Sm.) Barkworth

Wild. 9045932; Acc:1123; W6 22030. Collected in Oregon, United States. Elevation 1524 m. Grant County, 7 m E Prairie City. exposure SW (10%). Received as: *Elymus elymoides* var. *longifolium*.

The following were collected by R. von Bothmer. 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 655138. *Elymus nutans* Griseb.

Wild. H7070; W6 22069. Collected 08/04/1986 in Qinghai, China. Elevation 2300 m. in Xining, campus area of NW Plateau Biol. Inst. grassy pasture. Ploidy: 6x.

The following were collected by Yang. 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 655139. *Elymus dahuricus* subsp. *excelsus* (Turcz. ex Griseb.) Tzvelev

Wild. H7597; W6 22072. Collected 09/21/1986 in Xinjiang, China. Elevation 1320 m. Urumqi, Yongfeng ditch. Ploidy: 6x.

The following were collected by Bjoern Salomon, Swedish University of Agricultural Sciences, Department of Crop Science, P.O. Box 44, Alnarp, Malmöhus 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 655140. *Elymus sibiricus* L.

Wild. H7725; W6 22075. Collected 08/28/1987 in Xinjiang, China.
Elevation 1650 m. 45 km SW Urumqi. Ploidy: 4x.

The following were collected by R. von Bothmer; Bjoern Salomon, Swedish University of Agricultural Sciences, Department of Crop Science, P.O. Box 44, Alnarp, Malmöhus 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 655141. *Elymus tsukushiensis* Honda

Wild. H8002; W6 22082. Collected 08/23/1988 in Sichuan, China. Elevation 1600 m. Yinjin co, Nibashan.

PI 655142. *Elymus dahuricus* Turcz. ex Griseb.

Wild. H8006; W6 22083. Collected 08/23/1988 in Sichuan, China. Elevation 2000 m. Yinjin co, Nibashan, 190 km S Yaan.

PI 655143. *Elymus pseudonutans* A. Love

Wild. H8062; W6 22085. Collected 08/31/1988 in Sichuan, China. Elevation 3300 m. Barkam co, Shuajingsi, km stone 749.

PI 655144. *Elymus dahuricus* Turcz. ex Griseb.

Wild. H8084; W6 22086. Collected 09/03/1988 in Sichuan, China. Elevation 2540 m. Barkam agricult. stat., at the station.

PI 655145. *Elymus strictus* (Keng) A. Love

Wild. H8086; W6 22087. Collected 09/03/1988 in Sichuan, China. Barkam co, Barkam agricult. stat., mountain slopes.

PI 655146. *Elymus dahuricus* Turcz. ex Griseb.

Wild. H8127; W6 22089. Collected 09/09/1988 in Xizang, China. Elevation 3500 m. 55 km from Lhasa towards Gonggar, km stone 51.

PI 655147. *Elymus schugnanicus* (Nevski) Tzvelev

Wild. H8364; W6 22100. Collected 09/21/1988 in Xizang, China. Elevation 3500 m. 16 km W Gongbogyamda. Ploidy: 4x.

The following were collected by 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 655148. *Elymus dahuricus* subsp. *excelsus* (Turcz. ex Griseb.) Tzvelev

Wild. H8727; W6 22103. Collected 08/21/1989 in Xinjiang, China.
Elevation 800 m. Altai co, Hua Ling Park, just N Altai, Populus & Betula forest along.

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 655149. *Kengyilia rigidula* (Keng) J. L. Yang et al.

Wild. H9148B; W6 22130. Collected 08/17/1990 in Gansu, China. Elevation 3000 m. ca 2 km W of tourist hotel, Xiahe.

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 655150. *Achnatherum hymenoides* (Roem. & Schult.) Barkworth
Wild. Acc: 767; W6 22901. Collected in Utah, United States. Capitol Reef N.P., UT.

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 655151. *Achnatherum hymenoides* (Roem. & Schult.) Barkworth
Wild. T-596; W6 22952. Collected 2000 in New Mexico, United States. Crown Point city limits, McKinley Co., NM.

PI 655152. *Achnatherum hymenoides* (Roem. & Schult.) Barkworth
Wild. T-602; W6 22958. Collected 2000 in New Mexico, United States. 5 miles N Farmington on Hwy 170, San Juan Co., NM. associated plant spp. snakeweed, tumbleweed.

PI 655153. *Achnatherum hymenoides* (Roem. & Schult.) Barkworth
Wild. T-716; W6 22973. Collected 2000 in Utah, United States. Hwy 12 scenic overlook 1 mile S of Escalante River bridge, 14 miles E of Escalante, Garfield Co., UT. associated plant spp. pinyon, juniper, fringe sagebrush, curlleaf mountain mahogany, *Sporobolus cryptandrus*.

PI 655154. *Leymus cinereus* (Scribn. & Merr.) A. Love
Wild. T-1056; W6 23077. Collected 2000 in British Columbia, Canada. Latitude 50° 39' 50" N. Longitude 120° 5' 49" W. East of Kamloops, BC Hwy 1, north shore of S Thompson River. associated plant spp. *Kochia*, quackgrass, sweet clover, saltgrass.

PI 655155. *Leymus cinereus* (Scribn. & Merr.) A. Love
Wild. T-1060; W6 23078. Collected 2000 in British Columbia, Canada. Latitude 50° 44' 33" N. Longitude 120° 49' 36" W. 2.3 miles up S Guichon Creek Rd from Savona, BC (Hwy 1). associated plant spp. big sagebrush, rabbitbrush, serviceberry, Kentucky bluegrass, bluebunch wheatgrass, Rosa, slender wheatgrass.

PI 655156. *Leymus cinereus* (Scribn. & Merr.) A. Love
Wild. T-1062; W6 23079. Collected 2000 in British Columbia, Canada. Latitude 50° 12' 24" N. Longitude 120° 50' 45" W. 21 miles S Logan Lake, 5 miles N of the junction of Hwy 8 & 97c, Merritt, BC. associated plant spp. Kentucky bluegrass, crested wheatgrass, rabbitbrush, aspen, Rosa, knapweed.

PI 655157. *Leymus cinereus* (Scribn. & Merr.) A. Love
Wild. T-1063; W6 23080. Collected 2000 in British Columbia, Canada. Latitude 50° 9' 38" N. Longitude 120° 40' 50" W. S edge Nicola, BC, Hwy 5a. associated plant spp. thistle, quackgrass, smooth brome grass.

PI 655158. *Leymus cinereus* (Scribn. & Merr.) A. Love
Wild. T-1064; W6 23081. Collected 2000 in British Columbia, Canada.

Latitude 50° 8' 58" N. Longitude 120° 32' 39" W. 6 miles N
Nicola, BC on Hwy 5a, on berm above road. associated plant spp.
quackgrass, thistle.

- PI 655159. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-1066; W6 23082. Collected 2000 in British Columbia, Canada.
Latitude 50° 38' 50" N. Longitude 119° 55' 51" W. 1.5 miles E
Monte Creek, BC, waste site along RR.
- PI 655160. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-1070; W6 23083. Collected 2000 in British Columbia, Canada.
Latitude 49° 22' 42" N. Longitude 119° 36' 48" W. 0.2 miles S
jxn. Hwy 3a & 97, South Penticton, BC. associated plant spp. *Distichlis*,
ponderosa pine, bitterbrush, big sagebrush, knapweed.
- PI 655161. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-1080; W6 23090. Collected 2000 in Washington, United States.
Latitude 48° 36' 49" N. Longitude 119° 41' 36" W. 7m NE
Conconully, WA (Okanagan County). associated plant spp. knapweed, big
sagebrush, *Stipa comata*.
- PI 655162. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-1082; W6 23091. Collected 2000 in Washington, United States.
Latitude 48° 20' 20" N. Longitude 119° 41' 1" W. 6.5 miles W
Okanagan, WA Hwy 20. associated plant spp. quackgrass, knapweed, big
sagebrush, cheatgrass.
- PI 655163. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-1083; W6 23092. Collected 2000 in Washington, United States.
Latitude 48° 21' 43" N. Longitude 120° 1' 44" W. 26 miles W
Okanagan, WA, Hwy 20 mile marker 207 (SE Twisp, WA). associated plant
spp. *Sporobolus cryptandrus*, cheatgrass.
- PI 655164. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-1087; W6 23094. Collected 2000 in Washington, United States.
Latitude 47° 50' 30" N. Longitude 119° 55' 23" W. 3.6 miles E of
Chelan/Douglas County Line (Columbia River) on road to Mansfield, WA.
associated plant spp. rabbitbrush, big sagebrush, cheatgrass, *Stipa*
comata.
- PI 655165. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-1088; W6 23095. Collected 2000 in Washington, United States.
Latitude 47° 41' 13" N. Longitude 119° 52' 40" W. N Withrow, WA
On Hwy 172, mile marker 12 on edge of cultivated field. associated plant
spp. cheatgrass.
- PI 655166. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-1095; W6 23098. Collected 2000 in Washington, United States.
Latitude 46° 56' 8" N. Longitude 117° 54' 34" W. 5.3 miles W
Winona, WA, Endicott West Rd mile marker 28-27 (Whitman County).
associated plant spp. cheatgrass, sedge, *Equisetum*.
- PI 655167. *Elymus elymoides*** (Raf.) Swezey **subsp. *elymoides***
Wild. T-1303; W6 23099. Collected 2000 in Idaho, United States. Latitude
42° 54' 6" N. Longitude 114° 18' 50" W. 3 miles W Dietrich, ID
turnoff on Hwy 24 at RR crossing. associated plant spp. cheatgrass,
crested wheatgrass, mustard, bulbous bluegrass.

- PI 655168. *Elymus elymoides* subsp. *brevifolius*** (J. G. Sm.) Barkworth
Wild. T-1304; W6 23100. Collected 2000 in Idaho, United States. Latitude 43° 18' 30" N. Longitude 114° 17' 37" W. 26.5 miles N Shoshone, ID on Hwy 75 mile marker 100, 2.1 miles S of junction of Hwy 75 and 20. associated plant spp. rabbitbrush, big sagebrush, *Bromus briziformis*, cheatgrass, bluebunch wheatgrass, basin wildrye, slender wheatgrass.
- PI 655169. *Elymus elymoides* subsp. *brevifolius*** (J. G. Sm.) Barkworth
Wild. T-1305; W6 23101. Collected 2000 in Idaho, United States. Latitude 43° 20' 35" N. Longitude 114° 41' 18" W. Hwy 20, 7.7 miles W Baine Co. line, Camas County, ID, 4.7 miles E Fairfield, ID. associated plant spp. crested wheatgrass, cheatgrass, prickly lettuce, foxtail barley, intermediate wheatgrass, *Stipa*, *Agrostis*, *Lepidium*.
- PI 655170. *Elymus elymoides* subsp. *brevifolius*** (J. G. Sm.) Barkworth
Wild. T-1306; W6 23102. Collected 2000 in Idaho, United States. Latitude 43° 18' 35" N. Longitude 115° 26' 14" W. Hwy 20 and Anderson Reservoir, turnoff at mile marker 116.1, 1.5 miles E Boise NF boundary. associated plant spp. intermediate wheatgrass, cheatgrass, *Stipa*, rabbitbrush, big sagebrush, bitter Kentucky bluegrass, basin wildrye, *Bromus briziformis*.
- PI 655171. *Elymus multisetus*** (J. G. Sm.) Burt Davy
Wild. T-1310; W6 23105. Collected 2000 in New Mexico, United States. Latitude 36° 3' 16" N. Longitude 104° 47' 41" W. 5.6 NW Wagon Mound, NM, exit Hwy 120. associated plant spp. sunflower, cheatgrass, annual brome, quackgrass, broom snakeweed, winterfat, sand dropseed.

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 Experiment Station for Plant Genetic Resources, 27 Biyeckenov Street, Chelkar Town, Kazakhstan. Received 08/2000.

- PI 655172. *Agropyron cristatum*** (L.) Gaertn.
Wild. KAZ-004; W6 23293. Collected 08/2000 in Kazakhstan.
- PI 655173. *Agropyron desertorum*** (Fisch. ex Link) Schult.
Wild. KAZ-271; W6 23324. Collected 08/2000 in Kazakhstan. Latitude 48° 35' 9" N. Longitude 57° 42' 30" E. Elevation 200 m.
- PI 655174. *Agropyron desertorum*** (Fisch. ex Link) Schult.
Wild. KAZ-290; W6 23325. Collected 08/2000 in Kazakhstan. Latitude 48° 43' 23" N. Longitude 57° 5' 55" E. Elevation 193 m.
- PI 655175. *Agropyron desertorum*** (Fisch. ex Link) Schult.
Wild. KAZ-312; W6 23330. Collected 08/2000 in Kazakhstan. Latitude 49° 14' 14" N. Longitude 56° 30' 40" E. Elevation 164 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 655176. *Elymus andinus* Trin.

Wild. PRO 96-5; W6 23390. 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. *Elymus gayanus* at site immature.

PI 655177. *Poa* sp.

Wild. PRO 96-15; W6 23399. Collected 02/18/1996 in Argentina. Latitude 50° 21' 29" S. Longitude 71° 30' 22" W. Elevation 900 m. Santa Cruz, Los Escarchados, 63 km southeast from El Calafate, 13 km from Rio Bote. Slope:5-10% NW. Surface soil sandy and at 10-15 cm deep a cemented layer of silty sand.

PI 655178. *Bromus catharticus* Vahl var. *catharticus*

Wild. PRO 96-32; W6 23414. Collected 02/20/1996 in Chile. Latitude 51° 34' 5" S. Longitude 72° 31' 11" W. Elevation 120 m. Ultima Esperanza, Cueva del Milodn, 38 km north from Pto. Natales by Puerto Consuelo. Slope:10% NW. Over mature. Few seeds on plants.

PI 655179. *Bromus coloratus* Steud.

Wild. PRO 96-48; W6 23430. Collected 02/22/1996 in Chile. Latitude 51° 6' 54" S. Longitude 72° 49' 25" W. Elevation 300 m. Ultima Esperanza, Torres del Paine National Park, 1 km northeast from Ea. El Lazo. Slope:3% W. Panicles dense. Grows in isolated groups. 350-380 mm annual precipitation. Horse pasture used in park for tourists. V.

PI 655180. *Elymus andinus* Trin.

Wild. PRO 96-67; W6 23443. Collected 02/25/1996 in Chile. Latitude 52° 52' 35" S. Longitude 69° 57' 24" W. Elevation 10 m. Tierra del Fuego, Ea. Santa Elena, 65 km northeast from El Porvenir. Slope:3%.

PI 655181. *Poa* sp.

Wild. PRO 96-77; W6 23452. Collected 02/26/1996 in Chile. Latitude 54° 3' 24" S. Longitude 68° 45' 43" W. Tierra del Fuego, Pampa Guanaco, 4 km southeast from Carabineros, toward Chorrillo Los Perro. Slope:3% NE.

PI 655182. *Bromus* sp.

Wild. PRO 96-79; W6 23453. Collected 02/27/1996 in Chile. Latitude 54° 6' S. Longitude 68° 44' 21" W. Tierra del Fuego, Ea. Vicuna, 1 km northwest from Casco estancia on road between Lago Blanco. Slope:3% NE. Collected by side of road. Plants glabrous, without awns, panicle compact.

PI 655183. *Festuca magellanica* Lam.

Wild. PRO 96-90; W6 23462. Collected 02/28/1996 in Argentina. Latitude 54° 44' 29" S. Longitude 67° 50' 29" W. Tierra del Fuego, Rancho Hambre, 38 km northeast from Ushuaia, 110 m above Lago Fagnano. Slope:40% SW.

PI 655184. *Festuca magellanica* Lam.

Wild. PRO 96-92; W6 23464. Collected 02/29/1996 in Argentina. Latitude 54° 48' 30" S. Longitude 67° 32' 20" W. Tierra del Fuego, Cantera beginning of Rio Lasifashaj, 15 km northwest from Bahia Brown. Slope:10% N-N. Grows in open sites and also in isolated groups within forest.

PI 655185. *Agrostis* sp.

Wild. PRO 96-97; W6 23468. Collected 02/29/1996 in Argentina. Latitude 54° 56' 24" S. Longitude 66° 51' 55" W. Tierra del Fuego, Estancia Moat, 38 km east from Pto. Haberton. Slope:10% SW. Flag trees present at site.

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 655186. *Elymus nutans* Griseb.

Wild. TP00-01-001; W6 23478. Collected 08/20/2000 in Xizang, China. Latitude 35° 11' 10" N. Longitude 102° 29' 25" E. Elevation 2830 m. 2 km SW of Xiahe, Gansu Province. Farmland terrace along oat, barley, and rape fields with 500 mm precip., previously disturbed site SOIL:Gravelly loam SLOPE:45% ASPECT:N.

PI 655187. *Elymus dahuricus* subsp. *excelsus* (Turcz. ex Griseb.) Tzvelev

Wild. TP00-01-002; W6 23479. Collected 08/20/2000 in Xizang, China. Latitude 35° 11' 10" N. Longitude 102° 29' 25" E. Elevation 2830 m. 2 km SW of Xiahe, Gansu Province. Farmland terrace along oat, barley, and rape fields with 500 mm precip., previously disturbed site SOIL:Gravelly loam SLOPE:45% ASPECT:N.

PI 655188. *Elymus dahuricus* Turcz. ex Griseb.

Wild. TP00-03-010; W6 23485. Collected 08/20/2000 in Xizang, China. Latitude 35° 11' 33" N. Longitude 102° 35' 58" E. Elevation 2770 m. 5 km E of Xiahe, Gansu Province. Farmland terrace along oat, barley, club wheat, and rape fields near Daxiahe River SOIL:Silt loam SLOPE:0% ASPECT:None.

PI 655189. *Elymus dahuricus* subsp. *excelsus* (Turcz. ex Griseb.) Tzvelev

Wild. TP00-06-015; W6 23490. 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 655190. *Elymus pseudonutans* A. Love**
 Wild. TP00-10-037; W6 23509. Collected 08/24/2000 in Xizang, China.
 Latitude 34° 14' 49" N. Longitude 102° 20' 11" E. Elevation 3330
 m. 35 km NE of Maqu, Gansu Province. 4 km southwest of road junction to
 Maqu, sub-alpine meadow, winter pasture SOIL:Silt loam SLOPE:0-5%
 ASPECT:Flat-W.
- PI 655191. *Elymus pseudonutans* A. Love**
 Wild. TP00-11-040; W6 23512. Collected 08/25/2000 in Xizang, China.
 Latitude 34° 4' 13" N. Longitude 102° 9' 34" E. Elevation 3660
 m. 10 km NE of Maqu, Gansu Province. Sub-alpine meadow, upslope from
 road between Luqu and Maqu, not grazed SOIL:Silt loam SLOPE:40% ASPECT:S.
- PI 655192. *Elymus nutans* Griseb.**
 Wild. TP00-11-045; W6 23517. Collected 08/25/2000 in Xizang, China.
 Latitude 34° 4' 13" N. Longitude 102° 9' 34" E. Elevation 3660
 m. 10 km NE of Maqu, Gansu Province. Sub-alpine meadow, upslope from
 road between Luqu and Maqu, not grazed SOIL:Silt loam SLOPE:40% ASPECT:S.
- PI 655193. *Elymus nutans* Griseb.**
 Wild. TP00-12-051; W6 23522. 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 655194. *Elymus pseudonutans* A. Love**
 Wild. TP00-12-052; W6 23523. 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 655195. *Elymus nutans* Griseb.**
 Wild. TP00-14-056; W6 23527. Collected 08/26/2000 in Xizang, China.
 Latitude 34° 0' 29" N. Longitude 102° 45' 2" E. Elevation 3350
 m. 55 km E of Maqu, Sichuan Province. Downslope from road to Zoige,
 winter grazing, sub-alpine meadow SOIL:Loam SLOPE:5% ASPECT:SW.
- PI 655196. *Poa pratensis* L.**
 Wild. TP00-15-057; W6 23528. Collected 08/26/2000 in Xizang, China.
 Latitude 33° 48' 8" N. Longitude 102° 57' 36" E. Elevation 3300
 m. 25 km N of Zoige, Sichuan Province. West side of road to Zoige,
 sub-alpine meadow SOIL:Loam SLOPE:3-5% ASPECT:W.
- PI 655197. *Poa pratensis* L.**
 Wild. TP00-21-073; W6 23542. 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 655198. *Stipa capillacea* Keng**
 Wild. TP00-24-080; W6 23549. Collected 08/29/2000 in Xizang, China.
 Latitude 32° 52' 19" N. Longitude 102° 35' 6" E. Elevation 3370
 m. N of Hongyuan, Sichuan Province. Sub-alpine meadow, grass/shrub SOIL:
 SLOPE:10% ASPECT:SE.

- PI 655199. *Elymus sibiricus* L.**
 Wild. TP00-26-090; W6 23559. 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 655200. *Elymus dahuricus* subsp. *excelsus* (Turcz. ex Griseb.) Tzvelev**
 Wild. TP00-30-101; W6 23564. Collected 09/01/2000 in Xizang, China.
 Latitude 30° 45' 7" N. Longitude 101° 43' 32" E. Elevation 2320
 m. 22 km SW of Danba, Sichuan Province. Abandoned cropland with space
 planted ash tree seedlings SOIL:Gravelly loam SLOPE:5-10% ASPECT:NE.
- PI 655201. *Poa pratensis* L.**
 Wild. TP00-31-107; W6 23569. Collected 09/01/2000 in Xizang, China.
 Latitude 30° 32' 13" N. Longitude 101° 34' 56" E. Elevation 3750
 m. 68 km SE of Dafu, Sichuan Province. Sub-alpine meadow, winter
 pasture, fenced 3 years ago SOIL:Gravelly loam SLOPE:3-5% ASPECT:SE.
- PI 655202. *Elymus pseudonutans* A. Love**
 Wild. TP00-32-108; W6 23570. Collected 09/01/2000 in Xizang, China.
 Latitude 30° 32' 46" N. Longitude 101° 32' 26" E. Elevation 3550
 m. 64 km SE of Dafu, Sichuan Province. Sub-alpine meadow, oil saturated
 soils growing *Carex*. SOIL:Gravelly loam SLOPE:2-3% ASPECT:NE.
- PI 655203. *Elymus dahuricus* subsp. *excelsus* (Turcz. ex Griseb.) Tzvelev**
 Wild. TP00-33-114; W6 23576. Collected 09/01/2000 in Xizang, China.
 Latitude 30° 53' 12" N. Longitude 101° 13' 40" E. Elevation 3280
 m. 12 km SE of Dafu, Sichuan Province. Waste area near road, disturbed
 SOIL:Gravelly clay loam SLOPE:3-5% ASPECT:NW.
- PI 655204. *Elymus dahuricus* subsp. *excelsus* (Turcz. ex Griseb.) Tzvelev**
 Wild. TP00-34-118; W6 23580. Collected 09/02/2000 in Xizang, China.
 Latitude 31° 11' 23" N. Longitude 100° 51' 50" E. Elevation 2990
 m. 30 km SE of Luhuo, Sichuan Province. Slope next to creek, ungrazed
 SOIL:Gravelly clay loam SLOPE:0-25% ASPECT:SE.
- PI 655205. *Stipa przewalskyi* Roshev.**
 Wild. TP00-35-120; W6 23582. 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 655206. *Festuca ovina* L.**
 Wild. TP00-37-126; W6 23587. 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:60% ASPECT:N.
- PI 655207. *Elymus pseudonutans* A. Love**
 Wild. TP00-38-132; W6 23593. 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 655208. *Poa versicolor* subsp. *relaxa* (Ovcz.) Tzvelev**
 Wild. TP00-41-144; W6 23604. 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. Sub-alpine meadow SOIL:Clay loam SLOPE:20% ASPECT:NE.

PI 655209. *Elymus pseudonutans* A. Love

Wild. TP00-42-148; W6 23608. Collected 09/06/2000 in Xizang, China. Latitude 29° 30' 8" N. Longitude 100° 20' 43" E. Elevation 3810 m. 12 km SW of Tsosum, Sichuan Province. Sub-alpine shrub and tree SOIL:Granitic gravelly sand SLOPE:15-30% ASPECT:NE.

PI 655210. *Elymus pseudonutans* A. Love

Wild. TP00-44-162; W6 23621. Collected 09/07/2000 in Xizang, China. Latitude 30° 13' 22" N. Longitude 99° 51' 22" E. Elevation 4000 m. 2 km SE of Horni Township, 45 km NE Litang, Sichuan Province. Fenced winter pasture, sub-alpine meadow SOIL:Loam SLOPE:0-5% ASPECT:S.

PI 655211. *Elymus pseudonutans* A. Love

Wild. TP00-47-172; W6 23631. Collected 09/08/2000 in Xizang, China. Latitude 30° 9' 54" N. Longitude 100° 33' 20" E. Elevation 3950 m. 32 km NE of Litang, Sichuan Province. Fenced winter forage SOIL:Loam SLOPE:0-5% ASPECT:SE.

PI 655212. *Elymus dahuricus* subsp. *excelsus* (Turcz. ex Griseb.) Tzvelev

Wild. TP00-48-174; W6 23633. 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 655213. *Poa pratensis* L.

Wild. TP00-48-177; W6 23636. 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 655214. *Elymus dahuricus* subsp. *excelsus* (Turcz. ex Griseb.) Tzvelev

Wild. TP00-50-182; W6 23641. 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 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. Charchoqlian, National Academie of Sciences, Institute of Botany, Yerevan, Armenia. Received 06/24/2002.

PI 655215. *Melica transsilvanica* Schur

Wild. ARM 443; W6 24071. 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 655216. *Melica taurica* K. Koch

Wild. ARM 488; W6 24101. Collected 08/20/2001 in Armenia. Latitude 40° 34' 40" N. Longitude 44° 59' 23" E. Elevation 2006 m. Area known as Archanots (Bear place). Mountainside on south side of Lake Sevan. Reading is at base of slope, but we collected all the way to the top which was at 2300 masl.

PI 655217. *Koeleria macrantha* (Ledeb.) Schult.

Wild. ARM 499; W6 24110. 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.

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 655218. *Bromus inermis* Leyss. subsp. *inermis*

Wild. NMCS-3; 98SB5; W6 24201. Collected 07/14/1998 in New Mexico, United States. Latitude 36° 29' 30" N. Longitude 10° 21' 3" W. Union County; Northwest of Clayton, New Mexico. Roadway, slope 0-5%. Open, clay, seasonally dry, plateau. pH 8.1. Collection area 5 sq. m. Population distribution patchy, abundance occasional, source cultivated, in situ.

PI 655219. *Elymus canadensis* L.

Wild. NMCS-12; 98CWR4; W6 24208. Collected 07/15/1998 in New Mexico, United States.

PI 655220. *Melica nitens* (Scribn.) Nutt. ex Piper

Wild. OKCS-53; 98MN4; W6 24245. Collected 06/04/1998 in Oklahoma, United States. Latitude 34° 48' 58" N. Longitude 99° 2' 11" W. Kiowa County; Southwest of Roosevelt, Oklahoma. Grazed in the past. Slope 0-5%, 6-10% and 11-40%; aspect SW/W. Open, sand/loam, seasonally dry, rock outcropping/upper slope. Collection area 4,000 sq. meters. Population is patchy and occasional; source is wild, in situ.

PI 655221. *Poa arachnifera* Torr.

Wild. TXCS-5; 97TXB8; W6 24253. Collected 05/26/1997 in Texas, United States. Latitude 34° 20' 57" N. Longitude 99° 24' 4" W. Willbarger County; Approx. 5 miles east of Edell, Texas Baptist Church on Hwy. 91. Cultivated in the past, roadway now. Slope 0-5%. Open, sand, seasonally dry to always dry, stream terrace. pH 7.6. collection area 60 sq. meters. Population is patchy and frequent; source is wild, in situ.

PI 655222. *Bromus inermis* Leyss. subsp. *inermis*

Wild. TXCS-41; 98SB3; W6 24274. Collected 07/13/1998 in Texas, United States. Latitude 35° 47' 48" N. Longitude 10° 20' 43" W. Hartley County, Northwest of Channing Texas. Roadway, slope 0-5%. Open,

sand/loam, moist and seasonally dry, lower slope. pH 7.8. Collection area 2,000 sq. meters. Population is patchy and occasional; source is cultivated, in situ.

The following were donated by Federico Bertoli, University of Perugia, Plant Breeding Section, Department of Plant Biology & Biotechnology, Borgo Xx Giugno 74, Italy. Received 01/10/2004.

PI 655223. *Poa pratensis* L.

Wild. #3482; W6 24926. Collected 1999 in Italy. Latitude 43° 28' N. Longitude 12° 13' E. Elevation 288 m. Citta di Castello.

PI 655224. *Poa pratensis* L.

Wild. #4621; W6 24928. Collected 1999 in Italy. Latitude 43° 47' N. Longitude 12° 0' E. Elevation 850 m. Verghereto.

PI 655225. *Poa pratensis* L.

Wild. #4043; W6 24930. Collected 1999 in Italy. Latitude 43° 37' N. Longitude 12° 15' E. Elevation 1049 m. Bocca Trabaria.

PI 655226. *Poa pratensis* L.

Wild. #4546; W6 24931. Collected 1999 in Italy. Latitude 42° 27' N. Longitude 12° 59' E. Elevation 1050 m. Piano delle Rosce.

PI 655227. *Poa pratensis* L.

Wild. #4671; W6 24932. Collected 1999 in Italy. Latitude 42° 47' N. Longitude 13° 5' E. Elevation 604 m. Norcia.

PI 655228. *Poa pratensis* L.

Wild. #4672; W6 24933. Collected 1999 in Italy. Latitude 42° 59' N. Longitude 13° 13' E. Elevation 1070 m. Bolognola.

PI 655229. *Poa pratensis* L.

Wild. #4673; W6 24934. Collected 1999 in Italy. Latitude 44° 0' N. Longitude 11° 14' E. Elevation 270 m. Barbino di Mugello.

PI 655230. *Poa pratensis* L.

Wild. #4676; W6 24935. Collected 1999 in Italy. Latitude 42° 12' N. Longitude 12° 56' E. Elevation 542 m. Colle di Tora.

PI 655231. *Poa pratensis* L.

Wild. #4678; W6 24936. Collected 1999 in Italy. Latitude 43° 4' N. Longitude 12° 57' E. Elevation 643 m. Serravalle di Chienti.

PI 655232. *Poa pratensis* L.

Wild. #4682; W6 24937. Collected 1999 in Italy. Latitude 42° 6' N. Longitude 13° 26' E. Elevation 950 m. Massa D'Albe - Forme.

The following were developed by Mohamed Mergoum, North Dakota State University, Plant Sciences Dept., Loftsgard Hall, Fargo, North Dakota 58105-5051, United States. Received 10/24/2008.

PI 655233. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "ND901CL"; ND 901. REST 655233. Pedigree - Teal 11A/3/Grandin/FS4//*3Kulm. 'ND901CL' is a hard red spring wheat (HRSW)

(*Triticum aestivum* L.). It was developed at North Dakota State University (NDSU) and released by the North Dakota Agricultural Experiment Station (NDAES). ND901CL was released primarily for its tolerance to imadazolinone herbicides. ND901CL has superior adaptation to rainfed wheat production in western regions of North Dakota and counties in adjacent states. The name ND901CL was selected because it is a CLEARFIELD® wheat that will be used with Beyond® herbicide {active ingredient imazamox, 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-(methoxymethyl)-3-pyridinecarboxylic acid; BASF Corp. Research Triangle Park, NC}. The resistance to CLEARFIELD® herbicide in ND901CL is controlled by two genes. The als1 locus for acetolactate synthase, is located on the D genome and was transferred from 'FS4' wheat. The als2 is located on the B genome and originated from 'Teal 11A' wheat. ND901CL was derived from 'Teal 11A'/'3'/'Grandin' (PI 531005) /FS4//*3'/'Kulm' cross made at NDSU in 2002. Grandin and Kulm are two HRSW cultivars released by NDAES in 1989 and 1994, respectively. Both FS4 and Teal 11A were provided by the BASF Corp. to our breeding program. ND901CL was produced from a bulk of one purified F4:5 plot selected in 2003-04 at Christchurch, NZ. ND901CL was released because it combines high yield with good end-use quality and resistance to BEYOND® herbicide.

The following were developed by Texas AgriLife Research, College Station, Texas 77843, United States. Received 10/28/2008.

PI 655234 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. "TAM 304". PVP 200800396.

The following were developed by The Regents of the University of California, California, United States. Received 10/24/2008.

PI 655235 PVPO. *Vigna unguiculata* (L.) Walp. subsp. *unguiculata*
Cultivar. "CALIFORNIA BLACK EYE NO. 50". PVP 200800395.

The following were developed by Saka Pflanzenzucht GbR, Florida, United States. Donated by Valley Tissue Culture, Inc., Minnesota, United States. Received 10/29/2008.

PI 655236 PVPO. *Solanum tuberosum* L.
Cultivar. "PRINCESS". PVP 200300004.

The following were collected by Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Vladimir Chapurin, N.I. Vavilov Research Institute of Plant Industry, Perennial Forage Crops Genetic Resources Department, 42 Bolshaya Morskaya Str., St. Petersburg, Leningrad 190000, Russian Federation; Victor Kir'yan, Ustimovskaya Research Station, Poltava Region, S. Ustimovka, Ukraine; Tamara Buravtseva, N.I. Vavilov Research Institute of Plant Industry, Leguminous Crops Genetic Resources Industry, 42 Bolshaya Morskaya Str., St. Petersburg, Leningrad 190000, Russian Federation; Leonid Malyshev, N.I. Vavilov Research Institute of Plant Industry, Leguminous Crops Genetic Resources Industry, 42 Bolshaya Morskaya Str., St. Petersburg, Leningrad 190000, Russian Federation. Donated by Douglas A. Johnson, USDA, ARS, Forage

and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 06/09/2008.

PI 655237. *Trifolium arvense* L.

Wild. R07-06-020. Collected 08/10/2007 in Novgorod, Russian Federation. Latitude 57° 39' 5" N. Longitude 32° 7' 57" E. Elevation 41 m. Visyuchyy Bor Village, Demynsk District. Edge of pine/birch forest, steppe meadow. Associated species: *Artemisia vulgaris*, *Betula pubescens*, *Elytrigia repens*, *Festuca rubra*, and *Festuca valesiaca*.

PI 655238. *Trifolium arvense* L.

Wild. R07-07-024. Collected 08/11/2007 in Novgorod, Russian Federation. Latitude 57° 43' 22" N. Longitude 32° 34' 40" E. Elevation 96 m. 12 km NE of Demynsk Town, Demynsk District. Cleared area along edge of pine/birch forest; sandy gravel pit. Associated species: *Achillea millefolium*, *Betula pubescens*, *Dactylis glomerata*, *Elytrigia repens*, *Pinus sylvestris*, *Poa pratensis*, *Trifolium arvense*.

PI 655239. *Trifolium arvense* L.

Wild. R07-19-074. Collected 08/15/2007 in Vologda, Russian Federation. Latitude 58° 41' 47" N. Longitude 36° 10' 6" E. Elevation 140 m. Zalesye Village, Ustyuzhna District. Abandoned cropland surrounded by *Betula/Pinus* forest. Associated species: *Festuca pratensis*, *Trifolium medium*, *Dactylis glomerata*, *Centaurea* spp., *Vicia* spp., *Elytrigia repens*, *Pinus sylvestris*, *Betula pubescens*.

PI 655240. *Trifolium aureum* Pollich

Wild. R07-04-018. Collected 08/07/2007 in Novgorod, Russian Federation. Latitude 57° 51' 6" N. Longitude 31° 36' 5" E. Elevation 27 m. 0.4 km E Ramushevo Village, Demynsk District. Roadside and abandoned field. Associated species: *Calamagrostis epigeos*, *Festuca pratensis*, *Festuca rubra*, *Dactylis glomerata*, *Alopecurus pratensis*, *Deschampsia caespitosa*, *Salix* spp., *Trifolium media*, *Alnus incana*.

PI 655241. *Trifolium aureum* Pollich

Wild. R07-08-026. Collected 08/11/2007 in Novgorod, Russian Federation. Latitude 57° 48' 27" N. Longitude 32° 36' 5" E. Elevation 95 m. Syhay Niva Village, 22 km NNE of Demynsk Town, Demynsk District. Along roadside in edges of pine/birch forest in abandoned cropland. Associated species: *Pinus sylvestris*, *Betula pubescens*, *Alnus* spp., *Calamagrostis epigios*, *Trifolium arvense*, *Trifolium strepens*, *Lathyrus sylvestris*.

The following were developed by P. Stephen Baenziger, University of Nebraska, Department of Agronomy, 362D Plant Science Bldg., Lincoln, Nebraska 68583-0915, United States. Received 10/31/2008.

PI 655242. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "SETTLER CL"; NH03614. REST 655242. Pedigree - Wesley sib//Millennium sib/Above sib. NH03614 is moderately late in maturity (149.9 d after Jan.1, data from observations in NRPN) which is very similar to Wesley (149.7 after Jan. 1), about 1 d earlier flowering than 'Harding' (150.9 d after Jan. 1). NH03614 is a semi-dwarf wheat cultivar and contains RhtBlb (formerly Rht1, data provided by Dr. Guihua Bai). The mature plant height of NH03614 (73.7 cm) is 0.7 cm taller than Wesley and 9.6 cm shorter than Harding (Table 2). Using data from the 2007 Nebraska State Variety Trials in locations where lodging occurred,

NH03614 has moderate straw strength (24% lodged), which is superior to Infinity CL (39%) and less than Wesley (19%). The winter hardiness of NH03614 is good to very good and comparable to other winter wheat cultivars adapted and commonly grown in Nebraska. NH03614 is moderately resistant to stem rust (caused by *Puccinia graminis* Pers.: Pers. f. sp. *tritici* Eriks & E. Henn.) in field nursery tests inoculated with a composite of stem rust races and to wheat soilborne mosaic virus. In greenhouse tests, it is moderately resistant to races QFCS, MCCF, RKQQ, and has a heterogeneous reactions (e.g. some plants are resistant and others are susceptible) to races TPMK, TTTT, and TTKS (data provided by Y. Jin at the USDA Cereal Disease Laboratory). NH03614 is moderately resistant to moderately susceptible to Hessian fly (*Mayetiola destructor* Say). It is moderately susceptible to leaf rust (caused by *P. triticina* Eriks), stripe rust (caused by *P. striiformis* Westendorp f. sp. *tritici*, data obtained from field observations in the Great Plains). NH03614 is slightly less susceptible to *Fusarium* head blight (caused by *Fusarium graminearum* Schwabe) than many widely grown lines, based on disease severity ratings obtained from misted screening nurseries in Nebraska and South Dakota, . It is susceptible to wheat streak mosaic virus (data obtained from the Northern Regional Performance Nursery, 2006 and field observations in NE).

Unknown source. Received 11/04/2008.

PI 655243 PVPO. *Spinacia oleracea* L.

Cultivar. "SSB661087F". PVP 200900015. Developed in United States.

The following were developed by Sunbeam Extract Co., United States. Received 11/03/2008.

PI 655244 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "SUNBURST". PVP 200900008.

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 09/26/2008.

PI 655245. *Solanum stoloniferum* Schltdl. & Bouche

Wild. BdRF 163; TEMP 10. Collected 09/18/2008 in Arizona, United States. Latitude 32° 44' 11" N. Longitude 110° 2' 21" W. Elevation 2630 m. Graham County. Near Safford. Coronado National Forest. Pinaleno mts. West Peak. Up Tripp Canyon Road about 25 miles from 70 jct at Pima town. West slope of West Peak along dirt road from access gate to buildings just below summit lookout tower. Under ponderosas, fallen branches and ferns, rich moist soil. Thousands of plants, green to yellowing up to 10 inches. Small berries common, some immature, scar of fruit fly oviposit common. Collected 133 usable fruit yielding 2,895 original seeds.

- PI 655246. *Solanum stoloniferum* Schltdl. & Bouche**
 Wild. BdRF 164; TEMP 11. Collected 09/18/2008 in Arizona, United States. Latitude 32° 44' 39" N. Longitude 110° 2' 24" W. Elevation 2322 m. Graham County. Near Safford. Coronado National Forest. Pinaleno mts. Turkey Spring, site of Buhrow 174 [1982]. Up Tripp Canyon Road about 24 miles from 70 jct at Pima town. Just off E road edge at base of steep west-facing slope about 50 feet from Turkey Spring concrete springbox. In rich, moist organic soil under shade of giant firs. Only one small colony of about 20 small plants with berries, scar of fruit fly oviposit common. Collected 20 usable fruit yielding 620 original seeds.
- PI 655247. *Solanum stoloniferum* Schltdl. & Bouche**
 Wild. BdRF 165; TEMP 12. Collected 09/19/2008 in Arizona, United States. Latitude 32° 37' 44" N. Longitude 109° 50' 23" W. Elevation 2681 m. Graham County. Near Safford. Coronado National Forest. Pinaleno mts. On 366 about 20.1 miles from 191 jct at pullout "high point" in roadway. A few dozen small faded plants just off E road edge in open gravel and taller spindly plants lower on slope under branches and shade. Collected 3 usable fruit with scar of fruit fly oviposit, yielding 98 original seeds. Returned Sept 24 to collect 6 live plants of which 4 survive.
- PI 655248. *Solanum stoloniferum* Schltdl. & Bouche**
 Wild. BdRF 166; TEMP 13. Collected 09/20/2008 in Arizona, United States. Latitude 32° 43' 3" N. Longitude 109° 58' 44" W. Elevation 2728 m. Graham County. Near Safford. Coronado National Forest. Pinaleno mts. On 366 about 33.9 mi from 191 jct and 1.3 mi beyond turnoff to Riggs Lake. Along Clark Peak trail 301 where it skirts peak just W of terminus of gravel Swift Trail. Open steep NW-facing slopes in moist organic soil among scrub oak and raspberries and granite boulders. Several dozen small plants rarely with berries. Collected 10 usable fruit with scar of fruit fly oviposit, yielding 170 original seeds.
- PI 655249. *Solanum stoloniferum* Schltdl. & Bouche**
 Wild. BdRF 167; TEMP 14. Collected 09/20/2008 in Arizona, United States. Latitude 32° 43' 2" N. Longitude 109° 58' 41" W. Elevation 2755 m. Graham County. Near Safford. Coronado National Forest. Pinaleno mts. On 366 about 33.9 mi from 191 jct and 1.3 mi beyond turnoff to Riggs Lake. Along Clark Peak trail 301 where it skirts peak just W of terminus of gravel Swift Trail. Flats on both sides of trail that skirts S side of peak, in shade of firs in needle mulch and among granite rocks. A few dozen plants to 6" for collection of 18 usable fruit with scar of fruit fly oviposit, yielding 460 original seeds.
- PI 655250. *Solanum stoloniferum* Schltdl. & Bouche**
 Wild. BdRF 168; TEMP 15. Collected 09/20/2008 in Arizona, United States. Latitude 32° 42' 31" N. Longitude 109° 57' 52" W. Elevation 2670 m. Graham County. Near Safford. Coronado National Forest. Pinaleno mts. Riggs Lake. On 366 about 33.9 miles from 191 jct and about 0.5 miles S to Riggs Lake. Just off E side of parking lot. Flat under shade in rich black soil among grass, brush and fallen branches. Abundant and to large plants, mostly spindly. Collected 35 usable fruit, commonly with scar of fruit fly oviposit, yielding 175 original seeds.

- PI 655251. *Solanum stoloniferum*** Schltldl. & Bouche
 Wild. BdRF 169; TEMP 16. Collected 09/20/2008 in Arizona, United States. Latitude 32° 42' 56" N. Longitude 109° 56' 24" W. Elevation 2822 m. Graham County. Near Safford. Coronado National Forest. Pinaleno mts. On 366 about 31.8 miles from 191 jct at Chesley Flat about 300 ft S of roadway. Only one colony of small plants under shade of one small fir in flat meadow among grasses. Collected 39 usable fruit yielding 1,030 original seeds.
- PI 655252. *Solanum stoloniferum*** Schltldl. & Bouche
 Wild. BdRF 170; TEMP 17. Collected 09/20/2008 in Arizona, United States. Latitude 32° 41' 31" N. Longitude 109° 54' 15" W. Elevation 2835 m. Graham County. Near Safford. Coronado National Forest. Pinaleno mts. On 366 about 27.7 miles from 191 jct and about 50 yards down steep SE-facing decline below rock wall called "Fort Grant Vista Point". Growing in needle mulch, shaded, and between and on top of large granite boulders. Dozens of small plants, mostly senescing. No fruit, so collected about 12 live plants of which 7 survive.
- PI 655253. *Solanum stoloniferum*** Schltldl. & Bouche
 Wild. BdRF 171; TEMP 18. Collected 09/20/2008 in Arizona, United States. Latitude 32° 41' 11" N. Longitude 109° 53' 43" W. Elevation 2736 m. Graham County. Near Safford. Coronado National Forest. Pinaleno mts. On 366 about 26.6 miles from 191 jct at Moonshine Creek. In gentle SE-sloping meadow below 366 in hairpin. In grass among shade of ferns and particularly on SW-sides and under shade of low-slung branches of large firs. Abundant plants, small and yellow to tall (to 10"), green and spindly depending on exposure. Some withered flowers. Fruit rare, usually with scar of fruit fly oviposit, so only 33 usable fruit collected yielding 96 original seeds.
- PI 655254. *Solanum stoloniferum*** Schltldl. & Bouche
 Wild. BdRF 172; TEMP 19. Collected 09/21/2008 in Arizona, United States. Latitude 32° 40' 42" N. Longitude 109° 53' 36" W. Elevation 2701 m. Graham County. Near Safford. Coronado National Forest. Pinaleno mts. On 366 about 25.8 miles from 191 jct at Cunningham Campground. E of horse corral and about 30 paces E of campsite #9, in rich black soil among ferns. One colony of about 10 small plants. Collected 4 usable fruit yielding 95 original seeds.
- PI 655255. *Solanum stoloniferum*** Schltldl. & Bouche
 Wild. BdRF 173; TEMP 20. Collected 09/21/2008 in Arizona, United States. Latitude 32° 39' 37" N. Longitude 109° 53' 7" W. Elevation 2850 m. Graham County. Near Safford. Coronado National Forest. Pinaleno mts. On 366 about 23.9 mi from 191 jct to Grant Hill trailhead, then about 2 mi around NW "outer loop" trail to about 2,000 ft SE of Grant Hill. Just off S side of trail. E side of large granite rocks in partial shade. Small plants to 8" without berries growing in thin layer of duff right atop boulders. Only one colony of about 12 plants, 3 greenest collected of which all 3 survive.
- PI 655256. *Solanum stoloniferum*** Schltldl. & Bouche
 Wild. BdRF 174; TEMP 21. Collected 09/23/2008 in Arizona, United States. Latitude 32° 38' 9" N. Longitude 109° 49' 26" W. Elevation 2176 m. Graham County. Near Safford. Coronado National Forest. Pinaleno mts. On 366 about 13 miles from 191 jct at mile marker 127 near first pulloff E of where Twilight Creek passes under 366. In open N-facing

gravelly soil of roadcut. A few small plants. Collected 2 fruit yielding 17 original seeds.

- PI 655257. *Solanum stoloniferum* Schltdl. & Bouche**
Wild. BdRF 175; TEMP 22. Collected 09/23/2008 in Arizona, United States. Latitude 32° 37' 57" N. Longitude 109° 48' 57" W. Elevation 2259 m. Graham County. Near Safford. Coronado National Forest. Pinaleno mts. At Turkey Flat, on 366 about 14 miles from 191 jct at mile marker 128 at pulloff on N side of 366 near FR180 access and 330 Trailhead. In leaf mulch and gravel just off roadway among rocks in open to partial shade. Dozens of robust green plants to 6" with abundant mature berries. Collected 23 fruit yielding about 400 original seeds.
- PI 655258. *Solanum stoloniferum* Schltdl. & Bouche**
Wild. BdRF 176; TEMP 23. Collected 09/23/2008 in Arizona, United States. Latitude 32° 37' 39" N. Longitude 109° 49' 30" W. Elevation 2625 m. Graham County. Near Safford. Coronado National Forest. Pinaleno mts. On 366 about 15.3 miles from 191 jct and inside the first SE-facing hairpin that crosses 8,000 ft. In partial shade among grass and boulders in steep N-facing slope. Only one colony of about 20 tall, spindly plants. Two small fruit collected yield 16 original seeds.
- PI 655259. *Solanum stoloniferum* Schltdl. & Bouche**
Wild. BdRF 177; TEMP 24. Collected 09/23/2008 in Arizona, United States. Latitude 32° 39' 16" N. Longitude 109° 51' 53" W. Elevation 2691 m. Graham County. Near Safford. Coronado National Forest. Pinaleno mts. Snow Flat. On 366 about 21.2 miles from 191 jct then about _ mile down dirt road to Snow Flat campground. On E edge of road on final approach to campground. Several groups of small plants among grass and ferns and under firs. Most small and yellow, some taller and spindly, depending on exposure, some grazed. Berries rare. Two small fruit collected yield 17 original seeds.

The following were developed by Gary Peterson, Texas AgriLife Research, 1102 East FM 1294, Lubbock, Texas 79424, United States. Received 11/14/2008.

- PI 655260. *Sorghum bicolor* (L.) Moench subsp. *bicolor***
Breeding. Pureline. Tx2945. REST 655260. Pedigree - Tx2862*86EO361/(R5646*SC326-6). Tan plant color, red pericarp color, thin epicarp, no awns, tan glume color. Three dwarf in height. Days to 50% similar to Tx2783 and RTx430. Restores fertility (R-line) in A1 cytoplasm. Moderate level of resistance to biotype E greenbug (*Schizaphis graminum*). Resistant to head smut (caused by *Sphacelotheca reiliana*) and rust (caused by *Puccinia purpurea*).
- PI 655261. *Sorghum bicolor* (L.) Moench subsp. *bicolor***
Breeding. Pureline. Tx2946. REST 655261. Pedigree - (86EO361/(R5646*SC326-6)*GR107/((((SC110-14ms*(TAM428*Capbam der))))-2-3-1-1)*RTx430). Tan plant color, red pericarp color, thin epicarp, no awns, tan glume color. Three dwarf in height. Days to 50% similar to Tx2783 and RTx430. Restores fertility (R-line) in A1 cytoplasm. Moderate level of resistance to biotype E greenbug (*Schizaphis graminum*). Slightly susceptible to head smut (caused by *Sphacelotheca reiliana*). Resistant to rust (caused by *Puccinia purpurea*).

- PI 655262. *Sorghum bicolor* (L.) Moench subsp. *bicolor***
Breeding. Pureline. Tx2947. REST 655262. Pedigree - (88CC445/(RTx430*LASON68)*Tx2862). Tan plant color, thin epicarp, tan glume color, white pericarp color, awnless. Three dwarf in height. Days to 50% similar to Tx2783 and RTx430. Restores fertility (R-line) in A1 cytoplasm. High level of resistance to biotype E greenbug (*Schizaphis graminum*). Resistant to head smut (caused by *Sphacelotheca reiliana*) and rust (caused by *Puccinia purpurea*).
- PI 655263. *Sorghum bicolor* (L.) Moench subsp. *bicolor***
Breeding. Pureline. Tx2948. REST 655263. Pedigree - (88CC445/(RTx430*LASON68)*Tx2862). Tan plant color, thin epicarp, tan glume color, red pericarp color, awned. Three dwarf in height. Days to 50% similar to Tx2783 and RTx430. Restores fertility (R-line) in A1 cytoplasm. High level of resistance to biotype E greenbug (*Schizaphis graminum*). Resistant to head smut (caused by *Sphacelotheca reiliana*) and rust (caused by *Puccinia purpurea*).
- PI 655264. *Sorghum bicolor* (L.) Moench subsp. *bicolor***
Breeding. Pureline. Tx2949. REST 655264. Pedigree - ((87EO366/(TAM428*(Tx432*CS3541))*GR107/((((SC110-14ms*(TAM428*Capbam der))))-2-3-1-1)*RTx430)). Tan plant color, red pericarp color, thin epicarp, no awns, tan glume color. Three dwarf in height. Days to 50% similar to Tx2783 and RTx430. Restores fertility (R-line) in A1 cytoplasm. High level of resistance to biotype E greenbug (*Schizaphis graminum*). Resistant to head smut (caused by *Sphacelotheca reiliana*) and rust (caused by *Puccinia purpurea*).
- PI 655265. *Sorghum bicolor* (L.) Moench subsp. *bicolor***
Breeding. Pureline. Tx2950. REST 655265. Pedigree - ((87BH8606-4/(Tx433*(SC748*SC630))*GR127/(RTx430*(Tx2783*(((SC110-14ms*(TAM428*Capbam der))))-2-3-1-1)*Tx2737))). Tan plant color, thin epicarp, no awns, tan glume color, red epicarp color. Three dwarf in height. Days to 50% similar to Tx2783. Restores fertility (R-line) in A1 cytoplasm. Moderate level of resistance to biotype E greenbug (*Schizaphis graminum*). Resistant to head smut (caused by *Sphacelotheca reiliana*) and rust (caused by *Puccinia purpurea*).
- PI 655266. *Sorghum bicolor* (L.) Moench subsp. *bicolor***
Breeding. Pureline. Tx2951. REST 655266. Pedigree - ((87BH8606-4/(Tx433*(SC748*SC630))*GR127/(RTx430*(Tx2783*(((SC110-14ms*(TAM428*Capbam der))))-2-3-1-1)*Tx2737))). Tan plant color, thin epicarp, no awns, tan glume color, white epicarp color. Three dwarf in height. Days to 50% similar to Tx2783 and RTx430. Restores fertility (R-line) in A1 cytoplasm. High level of resistance to biotype E greenbug (*Schizaphis graminum*). Resistant to head smut (caused by *Sphacelotheca reiliana*) and rust (caused by *Puccinia purpurea*).
- PI 655267. *Sorghum bicolor* (L.) Moench subsp. *bicolor***
Breeding. Pureline. Tx2952. REST 655267. Pedigree - ((GR104/(Tx2783*(((SC110-14ms*(TAM428*Capbam der))))-2-3-1-1)*Tx2737))*((Tx432*CS3541)*SC326-6)). Tan plant color, red pericarp color, thin epicarp, no awns, tan glume color. Three dwarf in height. Days to 50% similar to Tx2783 and RTx430. Restores fertility (R-line) in A1 cytoplasm. Moderate level of resistance to biotype E greenbug (*Schizaphis graminum*). Resistant to head smut (caused by *Sphacelotheca reiliana*) and rust (caused by *Puccinia purpurea*).

- PI 655268. *Sorghum bicolor* (L.) Moench subsp. bicolor**
Breeding. Pureline. Tx2954. REST 655268. Pedigree -
(GR127/(RTx430*(Tx2783*(((SC110-14ms*(TAM428*Capbam
der)))-2-3-1-1)*Tx2737))*GR108/((((SC110-14ms*(TAM428*Capbam
der))-2-3-1-1*RTx430)-80-5)*SC414-12))). Tan plant color, red pericarp
color, thin epicarp, no awns, tan glume color. Three dwarf in height.
Days to 50% similar to Tx2783 and RTx430. Restores fertility (R-line) in
A1 cytoplasm. Moderate resistance to biotype E greenbug (*Schizaphis*
graminum). Resistant to head smut (caused by *Sphacelotheca reiliana*) and
rust (caused by *Puccinia purpurea*).
- PI 655269. *Sorghum bicolor* (L.) Moench subsp. bicolor**
Breeding. Pureline. Tx2955. REST 655269. Pedigree -
(GR127/(RTx430*(Tx2783*(((SC110-14ms*(TAM428*Capbam
der)))-2-3-1-1)*Tx2737))*GR108/((((SC110-14ms*(TAM428*Capbam
der))-2-3-1-1*RTx430)-80-5)*SC414-12))). Tan plant color, red pericarp
color, thin epicarp, no awns, tan glume color. Three dwarf in height.
Days to 50% similar to Tx2783 and RTx430. Restores fertility (R-line) in
A1 cytoplasm. High resistance to biotype E greenbug (*Schizaphis*
graminum). Resistant to head smut (caused by *Sphacelotheca reiliana*) and
rust (caused by *Puccinia purpurea*).
- PI 655270. *Sorghum bicolor* (L.) Moench subsp. bicolor**
Breeding. Pureline. Tx2956. REST 655270. Pedigree -
(GR127/(RTx430*(Tx2783*(((SC110-14ms*(TAM428*Capbam
der)))-2-3-1-1)*Tx2737))*GR108/((((SC110-14ms*(TAM428*Capbam
der))-2-3-1-1*RTx430)-80-5)*SC414-12))). Tan plant color, red pericarp
color, thin epicarp, no awns, tan glume color. Three dwarf in height.
Days to 50% similar to Tx2783 and RTx430. Restores fertility (R-line) in
A1 cytoplasm. Moderate resistance to biotype E greenbug (*Schizaphis*
graminum). Resistant to head smut (caused by *Sphacelotheca reiliana*) and
rust (caused by *Puccinia purpurea*).
- PI 655271. *Sorghum bicolor* (L.) Moench subsp. bicolor**
Breeding. Pureline. Tx2957. REST 655271. Pedigree -
(91CC371/(R2241*SC326-6))*GR107/((((SC110-14ms*(TAM428*Capbam
der)))-2-3-1-1)*RTx430)). Tan plant color, white pericarp color, thin
epicarp, no awns, tan glume color. Three dwarf in height. Days to 50%
similar to Tx2783 and RTx430. Restores fertility (R-line) in A1
cytoplasm. Moderate level of resistance to biotype E greenbug
(*Schizaphis graminum*). Resistant to head smut (caused by *Sphacelotheca*
reiliana) and rust (caused by *Puccinia purpurea*).
- PI 655272. *Sorghum bicolor* (L.) Moench subsp. bicolor**
Breeding. Pureline. Tx2958. REST 655272. Pedigree -
(Tx631*(((Tx378*(Tx378*Capbam der))-1-1-6-3)*Tx3042)). Tan plant color,
white pericarp color, thin epicarp, no awns, tan glume color. Three
dwarf in height. Days to 50% similar to Tx2783 and RTx430. Maintains
sterility (B-line) in A1 cytoplasm. High level of resistance to biotype
E greenbug (*Schizaphis graminum*). Resistant to head smut (caused by
Sphacelotheca reiliana) and rust (caused by *Puccinia purpurea*).
- PI 655273. *Sorghum bicolor* (L.) Moench subsp. bicolor**
Breeding. Pureline. Tx2959. REST 655273. Pedigree -
(Tx631*(((Tx378*(Tx378*Capbam der))-1-1-6-3)*Tx3042)). Tan plant color,
white pericarp color, thin epicarp, no awns, tan glume color. Three

dwarf in height. Days to 50% similar to Tx2783 and RTx430. Maintains sterility (B-line) in A1 cytoplasm. High level of resistance to biotype E greenbug (*Schizaphis graminum*). Resistant to head smut (caused by *Sphacelotheca reiliana*) and rust (caused by *Puccinia purpurea*).

PI 655274. *Sorghum bicolor* (L.) Moench subsp. bicolor

Breeding. Pureline. Tx2960. REST 655274. Pedigree - (Tx631*((Tx378*(Tx378*Capbam der))-1-1-6-3)*Tx3042)). Tan plant color, white pericarp color, thin epicarp, no awns, tan glume color. Three dwarf in height. Days to 50% similar to Tx2783 and RTx430. Maintains sterility (B-line) in A1 cytoplasm. High level of resistance to biotype E greenbug (*Schizaphis graminum*). Resistant to head smut (caused by *Sphacelotheca reiliana*) and rust (caused by *Puccinia purpurea*).

PI 655275. *Sorghum bicolor* (L.) Moench subsp. bicolor

Breeding. Pureline. Tx2961. REST 655275. Pedigree - ((88B885/BTx623*CS3541)*((Tx378*(Tx378*Capban der))-1-1-6-3)*Tx3042)). Tan plant color, red pericarp color, thin epicarp, no awns, tan glume color. Three dwarf in height. Days to 50% similar to Tx2783 and RTx430. Maintains sterility (B-line) in A1 cytoplasm. High level of resistance to biotype E greenbug (*Schizaphis graminum*). Resistant to head smut (caused by *Sphacelotheca reiliana*) and rust (caused by *Puccinia purpurea*).

The following were developed by Seminis Vegetable Seeds, Inc., Woodland, California, United States. Received 11/19/2008.

PI 655276 PVPO. *Spinacia oleracea* L.

Cultivar. "MSA661119M". PVP 200900033.

PI 655277 PVPO. *Spinacia oleracea* L.

Cultivar. "SSB661092M". PVP 200900034.

The following were developed by Syngenta Seeds, Inc., Slater, Iowa 50244, United States. Received 11/20/2008.

PI 655278 PVPO. *Zea mays* L. subsp. mays

Cultivar. "NPAF4467". PVP 200900016.

PI 655279 PVPO. *Zea mays* L. subsp. mays

Cultivar. "NPDI3004". PVP 200900017.

PI 655280 PVPO. *Zea mays* L. subsp. mays

Cultivar. "NPDI4214". PVP 200900018.

PI 655281 PVPO. *Zea mays* L. subsp. mays

Cultivar. "NPIC1011". PVP 200900019.

PI 655282 PVPO. *Zea mays* L. subsp. mays

Cultivar. "NPIC3423". PVP 200900020.

PI 655283 PVPO. *Zea mays* L. subsp. mays

Cultivar. "NPIC3426". PVP 200900021.

PI 655284 PVPO. Zea mays L. subsp. mays
Cultivar. "NPIC4428". PVP 200900022.

PI 655285 PVPO. Zea mays L. subsp. mays
Cultivar. "NPID3260". PVP 200900023.

PI 655286 PVPO. Zea mays L. subsp. mays
Cultivar. "NPID4373". PVP 200900024.

PI 655287 PVPO. Zea mays L. subsp. mays
Cultivar. "NPID4480". PVP 200900025.

PI 655288 PVPO. Zea mays L. subsp. mays
Cultivar. "NPID4586". PVP 200900026.

PI 655289 PVPO. Zea mays L. subsp. mays
Cultivar. "NPID5459". PVP 200900027.

PI 655290 PVPO. Zea mays L. subsp. mays
Cultivar. "NPXA6496". PVP 200900028.

The following were developed by Louisiana State University Agricultural Center, Louisiana, United States. Received 11/20/2008.

PI 655291 PVPO. Triticum aestivum L. subsp. aestivum
Cultivar. "LA95135". PVP 200900001.

PI 655292 PVPO. Avena sativa L.
Cultivar. "Horizon 270". PVP 200900002.

The following were developed by Progeny Advanced Genetics, Inc., Salinas, California, United States. Received 11/20/2008.

PI 655293 PVPO. Lactuca sativa L.
Cultivar. "Husky". PVP 200900003.

The following were developed by Mountain View Seeds, LTD, United States; Rutgers, The State University of New Jersey, New Jersey, United States. Received 11/20/2008.

PI 655294 PVPO. Poa pratensis L.
Cultivar. "BLUE NOTE". PVP 200900004.

PI 655295 PVPO. Poa pratensis L.
Cultivar. "VOLT". PVP 200900005.

The following were developed by GeneFresh, Inc., Salinas, California, United States. Received 11/20/2008.

PI 655296 PVPO. Lactuca sativa L.
Cultivar. "WINDCHILL". PVP 200900007.

The following were developed by North Dakota State University Research Foundation, North Dakota, United States. Received 11/20/2008.

PI 655297 PVPO. Phaseolus vulgaris L.
Cultivar. "ND307". PVP 200900009.

The following were developed by California Oils Corporation, Woodland, California, United States. Received 11/20/2008.

PI 655298 PVPO. Carthamus tinctorius L.
Cultivar. "S-334". PVP 200900011.

The following were developed by Louisiana State University Agricultural Center, Louisiana, United States; Florida Agricultural Experiment Station, Florida, United States. Received 11/20/2008.

PI 655299 PVPO. Avena sativa L.
Cultivar. "HORIZON LA976". PVP 200900012.

The following were developed by Enza Zaden Beheer B.V., Netherlands. Received 11/20/2008.

PI 655300 PVPO. Lactuca sativa L.
Cultivar. "VAIL". PVP 200900029.

The following were developed by Rutgers, The State University of New Jersey, New Jersey, United States; Novel AG, Inc., Oregon, United States. Received 11/20/2008.

PI 655301 PVPO. Festuca rubra L.
Cultivar. "FOXFIRE". PVP 200900031.

The following were developed by Novel AG, Inc., Oregon, United States. Received 11/20/2008.

PI 655302 PVPO. Poa pratensis L.
Cultivar. "GLADSTONE". PVP 200900032.

The following were developed by Sakata Seed America, Inc., United States. Received 11/20/2008.

PI 655303 PVPO. Solenostemon scutellarioides (L.) Codd
Cultivar. "SAKCOL017". PVP 200900035.

The following were developed by J. Mitchell McGrath, USDA, ARS, Michigan State University, 494 Plant & Soil Science Building, East Lansing, Michigan 48824-1325, United States. Received 12/03/2008.

PI 655304. *Beta vulgaris* L. subsp. *vulgaris*

Breeding. Population. EL55. Pedigree - EL55 is derived from 12 legacy seedlots dated from 1961 through 1982, selected on the basis of their ability to germinate and grow healthy roots in 2000. The 12 seedlots were 61G1X03, 77B2-01, 77B18X01, 78B32-01, 78B32X02, 79B15X70, 79B29-1, 79B31X04, 80B11-016, 80B14-23, 82B66X02, and 82B66-S3. Each seedlot yielded a single root, with the exception of 78B32-01 (5 roots), and all of these were used as mother roots and intercrossed in the 2001 greenhouse and increased in Oregon in 2003. EL55 is being released in the interest of improving seed quality and performance in sugar beet. From over 4,000 legacy seedlots produced between 1961 and 1989 stored in ambient (high humidity) conditions, only 523 emerged under field conditions at the Saginaw Valley Bean and Beet Farm in Saginaw, MI in 2000. Only 71 of these stored seedlots gave commercially adequate stands (ca. 50% of planted seed), however each of these good seedlots was produced after 1988. Roots from the 12 oldest seedlots (i.e. those stored the longest) were collected as mother roots, and seed was produced. Using an accelerated seed aging protocol, this seed demonstrated slightly improved seed longevity. The majority of this germplasm is derived from remnant seed generated during development of seed parents in the germplasm conversion to hybrid seed production conducted by George Hogaboam (USDA-ARS, deceased). Thus, this material is also expected to be useful for developing cytoplasmic male sterility (CMS) parents for hybrid seed production. Reasonable to high levels of *Aphanomyces* blackleg and *Cercospora* leaf spot resistances is present in this material, as is customary of traditional East Lansing ARS germplasm.

PI 655305. *Beta vulgaris* L. subsp. *vulgaris*

Breeding. EL-X1. Pedigree - EL-X1 (4PS1926) was constructed as seed mixture of nine F1 hybrids between a single plant each of WB879 and SP6822. The F1 hybrids were grown in an observation nursery and 30 roots were selected for plant vigor. In the greenhouse all plants were male sterile, and were pollinated with self-fertile 6869. Seed was harvested from individual plants, and nine of these were combined, and selected for *Aphanomyces* resistance. Seed from selections was increased for release. WB879, a wild *Beta vulgaris* spp. *maritima* accession (PI 540625) collected in 1989 on the coast of Brittany, France, was used as the wild beet donor germplasm in EL-X1. WB879 was used because its potential resistance to *Aphanomyces* diseases caused by *Aphanomyces* *cochlioides* by having a disease score of 1 (resistant) (rating system of 0-9 scale with 0 showing no symptoms and 9 being dead). The average rating of two *Aphanomyces* tolerant and two susceptible standards was 2.0 and 7.0, respectively (LSD(0.05)=1.83, average of two late readings). The sugar beet parents SP6822 and 6869 had scores of 1.0 and 5.5, respectively, and EL-X1 scored 2.8. EL-X1 contributes to broadening the genetic base for *Aphanomyces* resistance in sugar beet. This line may be useful for a number of basic and applied investigations.

PI 655306. *Beta vulgaris* L. subsp. *vulgaris*

Breeding. EL-X2. Pedigree - EL-X2 (4PS1927) was constructed from a cross between a single male sterile 6869 plant and a single SP6822 pollinator plant. Seed from this cross was planted in an observation nursery and one plant was selected for vigor and selfed. Three roots selected as free from disease and inter-crossed to give rise to the seed from which EL-X2 was selected. EL-X2 serves as a comparison for *Aphanomyces* tolerance relative to the other releases ELX1, ELX3, and ELX4 that used

WB879 or WB185 in their lineage. EL-X2 has the goal of understanding and broadening the genetic base for *Aphanomyces* resistance in sugar beet. This line may be useful for a number of basic and applied investigations. In particular, EL-X2 is a sugar beet counterpart to releases EL-X1, EL-X3, and EL-X4 that were developed simultaneously with EL-X2 to examine introgression of *Aphanomyces* resistance from wild germplasm. In the Beta seed *Aphanomyces* nursery, the average rating of two *Aphanomyces* tolerant and two susceptible standards was 2.0 and 7.0, respectively (LSD (0.05)=1.83, average of two late readings), the sugar beet parents SP6822 and 6869 had scores of 1.0 and 5.5, respectively, and EL-X2 scored 4.5.

PI 655307. *Beta vulgaris* L. subsp. *vulgaris*

Breeding. EL-X3. Pedigree - EL-X3 (4PS1928) was constructed from a cross between single plants of WB185 and 6869, and F1 seed was planted in the Saginaw observation nursery. 21 plants were selected for vigor, and self-pollinated in the greenhouse. Seed of these 21 lines was combined and grown in the 2003 *Aphanomyces* nursery in Shakopee, MN. Plants with reasonably evident taproots and few disease symptoms were selected and increased in Shakopee, and increased again in East Lansing, MI. EL-X3 is not currently suitable for variety development since it still has many characteristics of wild materials, however it has some improvement in taproot characteristics relative to the wild accession. In 2003, EL-X3 was tested in the Shakopee *Aphanomyces* nursery and rated on a 1 (resistant) to 9 (susceptible) scale. The average rating of two *Aphanomyces* tolerant and two susceptible standards was 2.0 and 7.0, respectively (LSD(0.05)=1.83, average of two late readings), the sugar beet parents SP6822 and 6869 had scores of 1.0 and 5.5, respectively, and EL-X3 scored 4.0. The wild beet parent of EL-X3 is WB185 (PI 546409), collected near Plymouth, England. WB185 is diploid, biennial, prostrate, with reported resistance to *Cercospora* leaf spot and *Polymyxa* betae. It was used because its potential resistance to *Aphanomyces* diseases caused by *Aphanomyces cochlioides* was evident by having a disease score of 1.0 (resistant) (rating system of 0-9 scale with 0 showing no symptoms and 9 being dead) in the 1994 Beta germplasm evaluation. Susceptible sugar beet 6869 (a progenitor of C869, PI 628754) was used as the sugar beet parent, and as a donor of the self-fertility (Sf) and nuclear male sterility characters. This release is expected to be self-fertile and segregating for nuclear male sterility. Tested seed was harvested from the sugar beet parent.

PI 655308. *Beta vulgaris* L. subsp. *vulgaris*

Breeding. EL-X4. Pedigree - EL-X4 (4PS1929) is from the cross between a single WB879 plant and the same 6869 plant used for EL-X3. Seed from this cross was planted in the 1998 observation nursery in Saginaw, MI, and seven roots were selected on plant vigor, and selfed seed was produced in the 1999 greenhouse. That seed was provided for the Shakopee *Aphanomyces* nursery, and seed was produced from selections within the nursery that had low disease incidence and improved root shape (e.g. lack of sprangled roots). WB879, a wild *Beta vulgaris* spp. *maritima* accession (PI 540625) collected in 1989 on the coast of Brittany, France, was used as the wild beet donor germplasm in EL-X4. WB879 was used because its potential resistance to *Aphanomyces* diseases caused by *Aphanomyces cochlioides* by having a disease score of 1 (resistant) (rating system of 0-9 scale with 0 showing no symptoms and 9 being dead) in the 1994 Beta germplasm evaluation nursery. EL-X4 is not currently suitable for variety development since it still has many

characteristics of wild materials, however it has some improvement in taproot characteristics relative to the wild accession. In 2003, EL-X4 was tested in the Shakopee *Aphanomyces* nursery and rated on a 1 (resistant) to 9 (susceptible) scale. The average rating of two *Aphanomyces* tolerant and two susceptible standards was 2.0 and 7.0, respectively (LSD(0.05)=1.83, average of two late readings), the sugar beet parent 6869 had score 5.5, and EL-X4 scored 3.8.

The following were developed by Kevin E. McPhee, North Dakota State University, 370G Loftgard Hall, P.O. Box 6050, Fargo, North Dakota 58108-6050, United States. Received 11/24/2008.

PI 655309. *Cicer arietinum* L.

Cultivar. Pureline. "SAWYER"; CA0090B347C. Pedigree - Dwelley(C95-604-1)/Eser 87(C95-603-4). Has resistance to pathotype I and II of *Ascochyta rabiei*, the causal organism of *Ascochyta* blight in chickpea. Plants of SAWYER averaged 43 cm (17 in.) tall and have an upright growth habit with simple type leaves. Flowering begins at about 20 cm (8 in.) above the soil surface and commences about 60 d after planting depending on climatic conditions compared to 67 and 62 d for Dwelley and Sierra, respectively. Has good resistance to lodging and remains upright at maturity. Crop maturity is earlier than Dwelley and Sierra and about 104 d after planting. Seeds average 43.8 g/100 seeds which is equivalent to 1043 seeds per pound compared to Dwelley and Sierra at 50.3 and 52.1 g/100 seeds and 920 and 882 seeds/pound, respectively.

PI 655310. *Lens culinaris* Medik.

Cultivar. Pureline. "SHASTA"; LC7601114YZ. Pedigree - LC960027/3/PI 345635/'Palouse'/'Brewer'. Flowers an average of 57 d after planting and matures in 103 d. Crop development is very similar to that of other lentil market classes and is similar in maturity to other zero-tannin breeding lines. Has an upright plant habit with an average vine length of 38 cm (15 in.) at peak flowering and 34 cm (14 in.) at maturity. Branched at the base and remains somewhat upright at maturity with a plant height index (ratio of canopy height at maturity to total vine length) of 0.89.

PI 655311. *Lens culinaris* Medik.

Cultivar. Pureline. "CEDAR"; LC00600917RZ. Pedigree - PI 345635/'Palouse'/'Brewer'/3/'Crimson'. Flowers an average of 57 d after planting and matures in 98 d. Crop development is very similar to that of other lentil market classes and approximately 10 d earlier to mature than other zero-tannin breeding lines. Has an upright plant habit with an average vine length of 35 cm (14 in.) at peak flowering and 33 cm (13 in.) at maturity. Branched at the base and remains somewhat upright at maturity with a plant height index (ratio of canopy height at maturity to total vine length) of 0.94.

The following were developed by Carlos Bainotti, INTA EEA, Ruta 12 S/N, 2580 - Marcos Juarez, Cordoba, Argentina. Received 11/21/2008.

PI 655312 QUAR. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "BIOINTA 2004". REST 655312. Pedigree - Selected from a population derived from 4 backcrosses (BC) completed in 1998

using 'ProINTA Puntal' (pedigree TAM101/CETURK*3//AMIGO) as the recurrent parent and PI 603918 (pedigree Pavon*8//T7AS-7S # 1S-7S / phlb) as the donor parent of the leaf rust resistance gene Lr47. Hard red winter wheat. Selected for its excellent grain yield potential, resistance to leaf rust (caused by *Puccinia triticina*) conferred mainly by the Lr47 gene selected by marker assisted selection (MAS), and its good bread making quality.

The following were developed by Pioneer Hi-Bred International, Inc., Johnston, Iowa 50131, United States. Received 12/03/2008.

PI 655313 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PHWSF". PVP 200800392.

The following were donated by HZPC Holland B.V., Canada; Phytocultures, Ltd., Prince Edward Island C1E 2B7, Canada. Received 12/02/2008.

PI 655314 PVPO. *Solanum tuberosum* L.
Cultivar. "CARRERA". PVP 200400108.

PI 655315 PVPO. *Solanum tuberosum* L.
Cultivar. "ANNABELLE". PVP 200400260.

PI 655316 PVPO. *Solanum tuberosum* L.
Cultivar. "SNOWBIRD". PVP 200500290.

The following were donated by A. Van / Elseleen Luyk / Wieten, HZPC Holland BV, Randweg 25, Postbus 99, Emmeloord, Netherlands; HZPC Holland B.V., Canada. Received 09/05/2001.

PI 655317 PVPO. *Solanum tuberosum* L.
Cultivar. "Ambra"; AL 267 A; Q 43545. PVP 200400261.

The following were donated by HZPC Holland B.V., Canada; Phytocultures, Ltd., Prince Edward Island C1E 2B7, Canada. Received 12/02/2008.

PI 655318 PVPO. *Solanum tuberosum* L.
Cultivar. "KENITA". PVP 200500269.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 05/18/1989.

PI 655319. *Vicia faba* L.
Cultivated. M89-23; W6 38. Collected 04/19/1989 in Morocco. Latitude 33° 53' N. Longitude 5° 37' W. Market place in city of Meknes.
Seed large.

PI 655320. *Vicia faba* L.
Cultivated. M89-33; W6 44. Collected 04/18/1989 in Morocco. Latitude 34° 2' N. Longitude 6° 15' W. Guich Experiment Station, Rabat.
Seed large type.

PI 655321. *Vicia faba* L.

Cultivated. M89-34; W6 45. Collected 04/19/1989 in Morocco. Latitude 34° 2' N. Longitude 6° 51' W. Guich Experiment Station, Rabat. Seed and pods large.

PI 655322. *Vicia faba* L.

Cultivated. M89-35; W6 46. Collected 04/19/1989 in Morocco. Latitude 34° 2' N. Longitude 6° 51' W. Farmers field 105km from Rabat on road from Fes to Rabat. Plants infested with *Orbanche crenata*.

PI 655323. *Vicia faba* L.

Cultivated. M89-36; W6 47. Collected 04/18/1989 in Morocco. Latitude 33° 50' N. Longitude 5° 39' W. Farmers field approx. 5km from Meknes on road from Rabat to Meknes. Seed medium to large. Plants heavily infested with *Orbanche crenata*.

PI 655324. *Vicia faba* L.

Wild. WJK 22; W6 2762. Collected 05/1989 in Syria. Elevation 400 m. Fefeen, about 30km northeast of Aleppo. Seed medium sized.

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 655325. *Vicia faba* L.

Cultivated. Abawi# 2; W6 3114. Collected in Peru.

The following were collected by Dave Eder, USDA-ARS, Western Regional Plant Introduction Sta., Washington State University, Pullman, Washington 99164-6402, United States. Received 03/14/1990.

PI 655326. *Vicia faba* L.

Cultivated. DE-12; W6 3672. Collected 01/27/1990 in Ecuador. Elevation 2736 m. Market near Otavalo. Seed large.

The following were donated by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; L.V. Kaiser, NW 420 Orion Drive, Pullman, Washington 99164, United States. Received 07/20/1992.

PI 655327. *Vicia faba* L.

Cultivated. Solomon bulk; W6 10545.

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 655328. *Vicia faba* L.

Cultivar. "347-2"; W6 12023.

The following were donated by USDA-ARS, Minnesota Agric. Exp. Station, St. Paul, Minnesota, United States. Received 1975.

PI 655329. *Vicia faba* var. *minuta* (hort. ex Alef.) Mansf.
Cultivar. "PETITE"; NSL 90521; W6 13864. CV-17.

The following were developed by Kenya Agriculture Res. Sta., Division of Plant Quarantine Services, P.O. Box 30148, Nairobi, Nairobi Area, Kenya. Donated by Int. Center for Agricultural Research in the Dry Areas, P.O. Box 2344, Cairo, Cairo, Egypt. Received 05/11/1978.

PI 655330. *Vicia faba* L.
Cultivar. "EUREKA"; E.A.I.No. 6007; W6 13975. Collected in Kenya.

PI 655331. *Vicia faba* L.
Cultivar. "NEB 247"; E.A.I.No. 6563; W6 13987. Collected in Kenya.

PI 655332. *Vicia faba* L.
Cultivar. "NEB 341"; E.A.I.No. 6566; W6 13990. Collected in Kenya.

PI 655333. *Vicia faba* L.
Cultivar. "NEB 710"; E.A.I.No. 6573; W6 13996. Collected in Kenya.

The following were collected by Tara Luna, 979 Eastman Drive, Big Fork, Montana 59911, United States. Received 04/03/1995.

PI 655334. *Vicia faba* L.
Cultivated. E-95-012; W6 16865. Collected 01/08/1995 in Bolivar, Ecuador. Latitude 1° 40' S. Longitude 79° 0' W. Elevation 2650 m. Guaranda. Approx. 1.5 hours W of Riobamba. Isolated farming region. Former native vegetation; highland *Festuca* grassland. Farming region up to approx. 3600 m. Volcanic soil, low stoniness, fair drainage. Collected at local market in Guaranda. Material from local farm; possibly grown at a higher elevation.

PI 655335. *Vicia faba* L.
Cultivated. E-85-021; W6 16874. Collected 02/02/1995 in Imbabura, Ecuador. Latitude 0° 15' N. Longitude 78° 15' W. Elevation 3000 m. Otavalo. Approx. 90 km N of Quito. Volcanic soil, fair drainage. Intercropped with potatoes and maize.

PI 655336. *Vicia faba* L.
Cultivated. E-95-022; W6 16875. Collected 02/02/1995 in Imbabura, Ecuador. Latitude 0° 15' N. Longitude 78° 15' W. Elevation 3000 m. Otavalo. Approx. 90 km N of Quito. Volcanic soil. Fair drainage. Intercropped with potatoes and maize.

The following were donated by Maqbool A. Bhatti, National Agricultural Research Ctr., P.O. NARC, Park Road, Islamabad, Pakistan. Received 09/25/1995.

PI 655337. *Vicia faba* L.
Landrace. PAK63014; W6 17373. Collected 07/24/1986 in Northern Areas, Pakistan. Latitude 35° 27' N. Longitude 75° 25' E. Elevation

2000 m. Shingrela Resor. 27 km before Skardu. Farmland. Irrigated. Undulating. Slope. Soil loam, brown, stoniness low, good drainage. Sown in March, harvested in July.

PI 655338. *Vicia faba* L.

Landrace. PAK63015; W6 17374. Collected 07/25/1986 in Northern Areas, Pakistan. Latitude 35° 13' N. Longitude 75° 37' E. Elevation 2120 m. Astana. 5 km from Skardu on Gilgit Road. Farmland. Irrigated. Hilly. Site level. Soil loam, brown, stoniness low, good drainage. Sown in May, harvested in September.

PI 655339. *Vicia faba* L.

Landrace. PAK63016; W6 17375. Collected 07/25/1986 in Northern Areas, Pakistan. Latitude 35° 17' N. Longitude 75° 36' E. Elevation 2100 m. Sher Kalan. 9 km from Skardu on Gilgit Road. Farmland. Irrigated. Mountainous. Site level. Soil loam, brown, stoniness low, good drainage. Sown in April, harvested in August.

PI 655340. *Vicia faba* L.

Landrace. PAK63019; W6 17378. Collected 07/31/1986 in Northern Areas, Pakistan. Latitude 36° 29' N. Longitude 73° 20' E. Elevation 2280 m. District Gilgit. Ghainsil. 14 km from Yasin to Thui Road. From farm store. Sown in April, harvested in August.

PI 655341. *Vicia faba* L.

Uncertain. PAK63035; W6 17391. Collected 01/14/1983 in Northern Areas, Pakistan. Elevation 2320 m. Husain Abad. 6 km from Skardu.

PI 655342. *Vicia faba* L.

Uncertain. PAK63036; W6 17392. Collected 01/16/1983 in Northern Areas, Pakistan. Elevation 2260 m. Skigar-Chanar. 6 km from Shigar.

PI 655343. *Vicia faba* L.

Uncertain. PAK63042; W6 17396. Collected 08/02/1983 in Northern Areas, Pakistan. Elevation 2900 m. Susist. Hunza Khungrab Road. From farm store. Sown in February, harvested in August.

PI 655344. *Vicia faba* L.

Landrace. PAK63043; W6 17397. Collected 08/02/1983 in Northern Areas, Pakistan. Elevation 2900 m. Susist. Hunza Khungrab Road. From farm store. Irrigated.

The following were donated by Adrian Russell, Crop & Food Research, Lincoln, Private Bag 4704, Christchurch, South Island, New Zealand; Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 07/1997.

PI 655345. *Vicia faba* L.

Cultivated. "Maris Bead"; SD96-18; W6 19134.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 03/1997.

PI 655346. *Vicia faba* L.

Cultivated. W6 19545. Collected 09/1990 in Italy. Ravello, Italy most likely at a market place. Large-seeded line.

The following were developed by Fratelli Ingegnoli, Stabilimento Agrario Botanico, Milan, Lombardy, Italy. Donated by Dennis Sherwood, 40604 North Kenosha Road, Zion, Illinois 60099-9341, United States. Received 11/1997.

PI 655347. *Vicia faba* L.

Cultivated. "Extra precoce a grand violetto"; W6 20168. Extra early and very violet. Seeds are green at the soft, eating stage and turn purple when dried and ripened. Good tasting and very large seeds.

The following were donated by Joseph Simcox, The Rare Vegetable Seed Consortium, C/O Steven Brack, Mesa Garden, Belen, New Mexico 87002, United States. Received 01/14/2005.

PI 655348. *Vicia faba* L.

Cultivated. Ziyad Brothers Imports; W6 26513.

PI 655349. *Vicia faba* L.

Cultivated. Al Suhagy; W6 26514. Collected 2005 in Egypt. Collected 2005 in Egypt.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 08/08/2003.

PI 655350. *Hordeum vulgare* L. subsp. *vulgare*

Cultivated. TKM26-172; NSGC 17604. Collected 06/02/2002 in Turkmenistan. Latitude 37° 35' 51" N. Longitude 54° 46' 9" E. Elevation 24 m.

PI 655351. *Hordeum vulgare* L. subsp. *vulgare*

Cultivated. TKM26-179; NSGC 17607. Collected 06/02/2002 in Turkmenistan. Latitude 37° 35' 51" N. Longitude 54° 46' 9" E. Elevation 24 m.

The following were developed by Mary C. Verhoeven, Oregon State University, Crop & Soil Sci Dept, Room 107, Crop Science Building, Corvallis, Oregon 97331-3002, United States; C. James Peterson, Oregon State University, Crop & Soil Science Dept., 107 Crop Science Bldg., Corvallis, Oregon 97331-3002, United States; Karim Ammar, Oregon State University, Crop Science Bldg. 225, Wheat Research Project, Corvallis, Oregon 97331, United States. Received 02/27/2007.

PI 655352. *Triticum turgidum* subsp. *durum* (Desf.) Husn.

Breeding. Pureline. OR948927; NSGC 18027. Pedigree - H7092-11/Westbred 881.

PI 655353. *Triticum turgidum* subsp. *durum* (Desf.) Husn.

Breeding. Pureline. OR971856; NSGC 18029. Pedigree - Uveyik 162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Westbred 881.

- PI 655354. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR971881; NSGC 18030. Pedigree - DF900-83/Westbred 881.
- PI 655355. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR924696; NSGC 18032. Pedigree - F380.81.767/Sahel 77.
- PI 655356. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR971849; NSGC 18033. Pedigree - Uveyik 162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Westbred 881.
- PI 655357. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR971886; NSGC 18034. Pedigree - DF900-83/Westbred 881.
- PI 655358. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR971894; NSGC 18035. Pedigree - Brindur/DF38-86.
- PI 655359. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR971895; NSGC 18036. Pedigree - Brindur/DF38-86.
- PI 655360. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR9801900; NSGC 18037. Pedigree - Quilafen/5/Uveyik 162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Westbred 881.
- PI 655361. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR9801915; NSGC 18038. Pedigree - Quilafen/5/Uveyik 162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Westbred 881.
- PI 655362. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR9801887; NSGC 18039. Pedigree - Westbred 881/5/D.130-16/4/Uveyik 162/61.130//HC6654/3/Akbasak/Oviachic 65.
- PI 655363. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR9801890; NSGC 18040. Pedigree - Westbred 881/5/D.130-16/4/Uveyik 162/61.130//HC6654/3/Akbasak/Oviachic 65.
- PI 655364. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR9801891; NSGC 18041. Pedigree - Westbred 881/5/D.130-16/4/Uveyik 162/61.130//HC6654/3/Akbasak/Oviachic 65.
- PI 655365. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR924696; NSGC 18043. Pedigree - F380.81.767/Sahel 77.
- PI 655366. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2000001; NSGC 18044. Pedigree - Uveyik 162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Vic.
- PI 655367. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2000002; NSGC 18045. Pedigree - Uveyik 162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Vic.
- PI 655368. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2000003; NSGC 18046. Pedigree - Uveyik 162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Vic.

- PI 655369. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2000004; NSGC 18047. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Vic.
- PI 655370. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2000007; NSGC 18048. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Vic.
- PI 655371. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2000008; NSGC 18049. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Vic.
- PI 655372. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2000009; NSGC 18050. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Vic.
- PI 655373. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2000011; NSGC 18051. Pedigree -
D.142-50/ID#3880157.
- PI 655374. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2000015; NSGC 18052. Pedigree - D.142-50/4/Ganso
sib/Jori C69/3/DF17.72//73.44.
- PI 655375. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2000018; NSGC 18053. Pedigree - Vic/DF38-86.
- PI 655376. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2000020; NSGC 18054. Pedigree - Westbred
881/4/Ganso sib/Jori C69/3/DF17.72//73.44.
- PI 655377. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2000021; NSGC 18055. Pedigree - Westbred
881/5/Ambral/3/Valnova/Valdur//7-5/4/DF142-85.
- PI 655378. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2000022; NSGC 18056. Pedigree -
Rodur/Quilafen//D.142-29.
- PI 655379. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2000024; NSGC 18057. Pedigree - Westbred
881/Rodur//D.138-112.
- PI 655380. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2000025; NSGC 18058. Pedigree - Westbred
881/Rodur//D.138-112.
- PI 655381. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2000026; NSGC 18059. Pedigree - Westbred
881/Rodur//D.138-112.
- PI 655382. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2001209; NSGC 18060. Pedigree - Westbred
881/Iceberg.

- PI 655383. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2001212; NSGC 18061. Pedigree - Westbred
881/Iceberg.
- PI 655384. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2001217; NSGC 18062. Pedigree - Westbred
881/Iceberg.
- PI 655385. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2001218; NSGC 18063. Pedigree - Westbred
881/Iceberg.
- PI 655386. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2001220; NSGC 18064. Pedigree - Westbred
881/Iceberg.
- PI 655387. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2001223; NSGC 18065. Pedigree - Westbred
881/Iceberg.
- PI 655388. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2001224; NSGC 18066. Pedigree - Westbred
881/Iceberg.
- PI 655389. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2001229; NSGC 18067. Pedigree - Westbred
881/Iceberg.
- PI 655390. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2001232; NSGC 18068. Pedigree - Quilafen/Aliparus.
- PI 655391. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2001233; NSGC 18069. Pedigree - Quilafen/Aliparus.
- PI 655392. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2001234; NSGC 18070. Pedigree - Quilafen/Aliparus.
- PI 655393. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2001236; NSGC 18071. Pedigree - Quilafen/Aliparus.
- PI 655394. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2001239; NSGC 18072. Pedigree - Quilafen/Aliparus.
- PI 655395. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2001586; NSGC 18073. Pedigree - Quilafen/Aliparus.
- PI 655396. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2001243; NSGC 18074. Pedigree - Quilafen/Aliparus.
- PI 655397. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2001245; NSGC 18075. Pedigree - Quilafen/Aliparus.
- PI 655398. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. TU991561; NSGC 18076. Pedigree -
HARA456/4/61-130/414-44//68111/Ward/3/69T02.

- PI 655399. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. TU991621; NSGC 18077. Pedigree - Akbugday/Rugby
New.N.Durum.
- PI 655400. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. TU991622; NSGC 18078. Pedigree -
Kobak2916//LSD//6783/3/Berkmen/7/CR//Apulicum/3/?.
- PI 655401. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. TU991627; NSGC 18079. Pedigree -
Hara456/4/61-130/414-44//68111/Ward/3/G69T02/5/Sorgul/Yerli.
- PI 655402. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. TU991628; NSGC 18080. Pedigree - UVY
PI17820/G75T171//Sorgul/Yerli.
- PI 655403. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. TU991632; NSGC 18081. Pedigree - Dicle 74/Halkali 58.
- PI 655404. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. TU991637; NSGC 18082. Pedigree -
Berkmen//68111/Ward/4/Riccya/Berkmen/3/Kobak/Leeds//6783.
- PI 655405. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. TU991640; NSGC 18083. Pedigree -
68111/Ward//AU109/3/Berkmen/D7233.
- PI 655406. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. TU991643; NSGC 18084. Pedigree -
68140/Ward//LM94/ROMCZDWF/3/Akbasak.
- PI 655407. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. TU991644; NSGC 18085. Pedigree -
68140/Ward//LM94/TOMCZDWF/3/Akbasak.
- PI 655408. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. TU991645; NSGC 18086. Pedigree -
Chen/Aleppo//G75T212/Roccia.
- PI 655409. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. TU991646; NSGC 18087. Pedigree -
?/SRG/3/Berkmen/G00516//UV126/61-130.
- PI 655410. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. TU991647; NSGC 18088. Pedigree -
Berkmen/Wells//Akbasak.
- PI 655411. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010478; NSGC 18090. Pedigree -
Vic//Valgiorgio/Parus.
- PI 655412. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010483; NSGC 18091. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.

- PI 655413. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR9801890; NSGC 18092. Pedigree - Westbred
881/5/D.130-16/4/Uveyik 162/61.130//HC6654/3/Akbasak/Oviachic 65.
- PI 655414. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010485; NSGC 18093. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655415. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010491; NSGC 18094. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655416. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010496; NSGC 18095. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655417. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010498; NSGC 18096. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655418. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010502; NSGC 18097. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655419. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010504; NSGC 18098. Pedigree -
7-5/Valgerardo//Edmore/3/Topaz/3/SN Turk MI83-84 503.
- PI 655420. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010505; NSGC 18099. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655421. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010506; NSGC 18100. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655422. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010507; NSGC 18101. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655423. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010509; NSGC 18102. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655424. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010510; NSGC 18103. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655425. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010514; NSGC 18104. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655426. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010518; NSGC 18105. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.

- PI 655427. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010519; NSGC 18106. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655428. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010520; NSGC 18107. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655429. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010521; NSGC 18108. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655430. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010534; NSGC 18109. Pedigree -
Vic/D.142-50//H7092-12.
- PI 655431. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010537; NSGC 18110. Pedigree -
Vic/D.142-50//H7092-12.
- PI 655432. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010539; NSGC 18111. Pedigree -
Vic/D.142-50//H7092-12.
- PI 655433. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010540; NSGC 18112. Pedigree -
Vic/D.142-50//H7092-12.
- PI 655434. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010542; NSGC 18113. Pedigree -
Vic/D.142-50//H7092-12.
- PI 655435. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010543; NSGC 18114. Pedigree - Westbred
881/Parus/4/Uveyik 162/61.130//HC6654/3/Akbasak/Oviachic 65.
- PI 655436. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010547; NSGC 18115. Pedigree - Westbred
881/Parus/4/Uveyik 162/61.130//HC6654/3/Akbasak/Oviachic 65.
- PI 655437. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010548; NSGC 18116. Pedigree - Westbred
881/Parus/4/Uveyik 162/61.130//HC6654/3/Akbasak/Oviachic 65.
- PI 655438. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010554; NSGC 18117. Pedigree -
D.142-50/ID#3880157/Parus.
- PI 655439. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010555; NSGC 18118. Pedigree -
D.142-50/ID#3880157/Parus.
- PI 655440. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010556; NSGC 18119. Pedigree -
D.142-50/ID#3880157/Parus.

- PI 655441. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010558; NSGC 18120. Pedigree -
D.142-50/ID#3880157/Parus.
- PI 655442. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010567; NSGC 18121. Pedigree -
Vic/Parus//D.142-50.
- PI 655443. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010569; NSGC 18122. Pedigree -
Vic/Parus//D.142-50.
- PI 655444. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010578; NSGC 18123. Pedigree -
84004/Valnova//Casoar/3/7-5 5//Valgerardo/Edmore/3/SOD 211-RWA Res.
- PI 655445. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010579; NSGC 18124. Pedigree -
84004/Valnova//Casoar/3/7-5 5//Valgerardo/Edmore/3/SOD 211-RWA Res.
- PI 655446. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010582; NSGC 18125. Pedigree -
84004/Valnova//Casoar/3/7-5 5//Valgerardo/Edmore/3/SOD 211-RWA Res.
- PI 655447. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010586; NSGC 18126. Pedigree - H7092-11/Westbred
881//SOD211-RWA Res.
- PI 655448. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010587; NSGC 18127. Pedigree -
Valnova/Casoar//7-5/3/D1306/84004/4/Parus.
- PI 655449. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010596; NSGC 18128. Pedigree -
7-5/Valgerardo//Edmore/3/Topaz/3/DF82-85.
- PI 655450. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2000008; NSGC 18129. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Vic.
- PI 655451. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010599; NSGC 18130. Pedigree -
7-5/Valgerardo//Edmore/3/Topaz/3/DF82-85.
- PI 655452. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010601; NSGC 18131. Pedigree -
7-5/Valgerardo//Edmore/3/Topaz/3/DF82-85.
- PI 655453. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010606; NSGC 18132. Pedigree - SOD211-RWA
Res/4/7-5/Valgerardo//Edmore/3/Topaz.
- PI 655454. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010608; NSGC 18133. Pedigree - SOD211-RWA
Res/4/7-5/Valgerardo//Edmore/3/Topaz.

- PI 655455. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010609; NSGC 18134. Pedigree - SOD211-RWA
Res/4/7-5/Valgerardo//Edmore/3/Topaz.
- PI 655456. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010610; NSGC 18135. Pedigree - SOD211-RWA
Res/4/7-5/Valgerardo//Edmore/3/Topaz.
- PI 655457. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010611; NSGC 18136. Pedigree - Quilafen/Parus.
- PI 655458. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010627; NSGC 18137. Pedigree -
Quilafen//H7092-11/Westbred 881/3/DF82-85.
- PI 655459. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010628; NSGC 18138. Pedigree -
Quilafen//H7092-11/Westbred 881/3/DF82-85.
- PI 655460. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010634; NSGC 18139. Pedigree -
Quilafen//H7092-11/Westbred 881/3/DF82-85.
- PI 655461. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010635; NSGC 18140. Pedigree -
7-5/Valgerardo//Edmore/3/Topaz/3/SN Turk MI83-84 503.
- PI 655462. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010637; NSGC 18141. Pedigree - Westbred
881/H7092-12//DF202-85.
- PI 655463. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010643; NSGC 18142. Pedigree - Westbred
881/4/7-5/Valgerardo//Edmore/3/Topaz/5/SN Turk MI83-84 503.
- PI 655464. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010644; NSGC 18143. Pedigree - Westbred
881/4/7-5/Valgerardo//Edmore/3/Topaz/5/SN Turk MI83-84 503.
- PI 655465. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010645; NSGC 18144. Pedigree - Westbred
881/4/7-5/Valgerardo//Edmore/3/Topaz/5/SN Turk MI83-84 503.
- PI 655466. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010658; NSGC 18145. Pedigree - Westbred
881/4/7-5/Valgerardo//Edmore/3/Topaz/5/SN Turk MI83-84 503.
- PI 655467. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2000011; NSGC 18146. Pedigree -
D.142-50/ID#3880157.
- PI 655468. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR971897; NSGC 18147. Pedigree - Brindur/DF38-86.
- PI 655469. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR9801888; NSGC 18148. Pedigree - Westbred
881/5/D.130-16/4/Uveyik 162/61.130//HC6654/3/Akbasak/Oviachic 65.

- PI 655470. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR9801889; NSGC 18149. Pedigree - Westbred
881/5/D.130-16/4/Uveyik 162/61.130//HC6654/3/Akbasak/Oviachic 65.
- PI 655471. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2000005; NSGC 18150. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Vic.
- PI 655472. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2000012; NSGC 18151. Pedigree - D.142-50/4/Ganso
sib/Jori C69/3/DF17.72//73.44.
- PI 655473. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2000014; NSGC 18153. Pedigree - D.142-50/4/Ganso
sib/Jori C69/3/DF17.72//73.44.
- PI 655474. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR9800646; NSGC 18154. Pedigree - MvTD29-94.
- PI 655475. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2001208; NSGC 18155. Pedigree - Westbred
881/Iceberg.
- PI 655476. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2001235; NSGC 18158. Pedigree - Quilafen/Aliparus.
- PI 655477. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010497; NSGC 18159. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655478. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010503; NSGC 18160. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655479. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010515; NSGC 18161. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655480. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010516; NSGC 18162. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655481. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010517; NSGC 18163. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655482. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010525; NSGC 18164. Pedigree -
Vic/Brindur/4/Uveyik 162/61.130//HC6654/3/Akbasak/Oviachic 65.
- PI 655483. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010535; NSGC 18165. Pedigree -
Vic/D.142-50//H7092-12.

- PI 655484. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010557; NSGC 18166. Pedigree -
D.142-50/ID#3880157/Parus.
- PI 655485. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010559; NSGC 18167. Pedigree -
D.142-50/ID#3880157/Parus.
- PI 655486. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010580; NSGC 18168. Pedigree -
84004/Valnova//Casoar/3/7-5 5//Valgerardo/Edmore/3/SOD211-RWA Res.
- PI 655487. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010581; NSGC 18169. Pedigree -
84004/Valnova//Casoar/3/7-5 5//Valgerardo/Edmore/3/SOD211-RWA Res.
- PI 655488. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010583; NSGC 18170. Pedigree -
84004/Valnova//Casoar/3/7-5 5//Valgerardo/Edmore/3/SOD211-RWA Res.
- PI 655489. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010585; NSGC 18171. Pedigree - H7092-11/Westbred
881//SOD211-RWA Res.
- PI 655490. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010600; NSGC 18172. Pedigree -
7-5/Valgerardo//Edmore/3/Topaz/3/DF82-85.
- PI 655491. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010607; NSGC 18173. Pedigree - SOD211-RWA
Res/4/7-5/Valgerardo//Edmore/?.
- PI 655492. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010624; NSGC 18174. Pedigree -
Quilafen//H7092-11/Westbred 881/3/DF82-85.
- PI 655493. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010625; NSGC 18175. Pedigree -
Quilafen//H7092-11/Westbred 881/3/DF82-85.
- PI 655494. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010629; NSGC 18176. Pedigree -
Quilafen//H7092-11/Westbred 881/3/DF82-85.
- PI 655495. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010630; NSGC 18177. Pedigree -
Quilafen//H7092-11/Westbred 881/3/DF82-85.
- PI 655496. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010631; NSGC 18178. Pedigree -
Quilafen//H7092-11/Westbred 881/3/DF82-85.
- PI 655497. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Breeding. Pureline. OR2010632; NSGC 18179. Pedigree -
Quilafen//H7092-11/Westbred 881/3/DF82-85.

- PI 655498. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010633; NSGC 18180. Pedigree -
Quilafen//H7092-11/Westbred 881/3/DF82-85.
- PI 655499. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010636; NSGC 18181. Pedigree - Westbred
881/H7092-12//DF202-85.
- PI 655500. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010642; NSGC 18182. Pedigree - Westbred
881/4/7-5/Valgerardo//Edmore/3/Topaz/5/SN Turk MI83-84 503.
- PI 655501. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010647; NSGC 18183. Pedigree - Westbred
881/4/7-5/Valgerardo//Edmore/3/Topaz/5/SN Turk MI83-84 503.
- PI 655502. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010648; NSGC 18184. Pedigree - Westbred
881/4/7-5/Valgerardo//Edmore/3/Topaz/5/SN Turk MI83-84 503.
- PI 655503. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010649; NSGC 18185. Pedigree - Westbred
881/4/7-5/Valgerardo//Edmore/3/Topaz/5/SN Turk MI83-84 503.
- PI 655504. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010650; NSGC 18186. Pedigree - Westbred
881/4/7-5/Valgerardo//Edmore/3/Topaz/5/SN Turk MI83-84 503.
- PI 655505. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010652; NSGC 18187. Pedigree - Westbred
881/4/7-5/Valgerardo//Edmore/3/Topaz/5/SN Turk MI83-84 503.
- PI 655506. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010653; NSGC 18188. Pedigree - Westbred
881/4/7-5/Valgerardo//Edmore/3/Topaz/5/SN Turk MI83-84 503.
- PI 655507. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010654; NSGC 18189. Pedigree - Westbred
881/4/7-5/Valgerardo//Edmore/3/Topaz/5/SN Turk MI83-84 503.
- PI 655508. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010655; NSGC 18190. Pedigree - Westbred
881/4/7-5/Valgerardo//Edmore/3/Topaz/5/SN Turk MI83-84 503.
- PI 655509. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010656; NSGC 18191. Pedigree - Westbred
881/4/7-5/Valgerardo//Edmore/3/Topaz/5/SN Turk MI83-84 503.
- PI 655510. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010657; NSGC 18192. Pedigree - Westbred
881/4/7-5/Valgerardo//Edmore/3/Topaz/5/SN Turk MI83-84 503.
- PI 655511. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010659; NSGC 18193. Pedigree - Westbred
881/4/7-5/Valgerardo//Edmore/3/Topaz/5/SN Turk MI83-84 503.

- PI 655512. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010660; NSGC 18194. Pedigree - Westbred
881/4/7-5/Valgerardo//Edmore/3/Topaz/5/SN Turk MI83-84 503.
- PI 655513. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010662; NSGC 18195. Pedigree - Westbred
881/4/7-5/Valgerardo//Edmore/3/Topaz/5/SN Turk MI83-84 503.
- PI 655514. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010663; NSGC 18196. Pedigree - Westbred
881/4/7-5/Valgerardo//Edmore/3/Topaz/5/SN Turk MI83-84 503.
- PI 655515. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010664; NSGC 18197. Pedigree -
Vic/D.142-50//H7092-12.
- PI 655516. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010668; NSGC 18198. Pedigree -
7-5/Valgerardo//Edmore/3/Topaz/4/Westbred 881/5/DF71-85.
- PI 655517. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010669; NSGC 18199. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.
- PI 655518. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Breeding. Pureline. OR2010670; NSGC 18200. Pedigree - Uveyik
162/61.130//HC6654/3/Akbasak/Oviachic 65/4/Renville/5/H7092-12.

The following were developed by Michael D. Peel, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 12/13/2008.

- PI 655519. *Medicago sativa* subsp. *falcata*** (L.) Arcang.
Cultivar. Population. "DON"; AU021. Pedigree - Don was derived from the original PI20725. It under went three cycles of recurrent selection for uniform flower color, upright plants with increased size, persistence, and seed production. Selection cycles were completed in 1976 at Brookings, SD; 1978 at Utah State Univ. Bluecreek farm; 1984 and 1999 at Utah State Univ. Evans Farm. 'Don' a diploid *falcata* alfalfa (*Medicago sativa* subsp *falcata* L.) developed by the Forage and Range Research Laboratory in Logan, Utah in cooperation with the Utah Agricultural Experiment Station, Utah State University. Recent interest in *falcate* alfalfa has been high due to its value for increasing the productivity of rangelands. Don was selected for persistence under harsh conditions, uniform yellow flower color, increased seed production and large stature plants. Don traces to PI20725, an original collection made by N.E. Hansen in the Don Province of Russia. Don was tested as AU021. Don is significantly more persistent than typical *sativa* type alfalfas and is meant for use in mixed plantings with grasses either in range or pasture situations typical of the Intermountain region of the Western U.S. In comparative trials, including irrigated and non-irrigated, where 25 to 50 percent mortality was observed on *sativa* alfalfas, Don showed no mortality. When used in mixtures the production advantage with tall fescue and meadow brome ranged from 10 to 32 percent. When grown with crested wheat grass on dry rangelands, similar production advantages are expected which will make rangelands more productive. Furthermore, when

grown in mixtures with grasses, Don will not dominate; rather it has a low growth habit and stays well below the canopy of most cool season grasses.

The following were developed by Seminis Vegetable Seeds, Inc., Woodland, California, United States. Received 12/05/2008.

PI 655520 PVPO. *Pisum sativum* L.

Cultivar. "XP 08550820". PVP 200900039.

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Solanum stoloniferum (653763-653764, 653771, 653775, 653777-653778, 653780, 653793-653798, 653806-653807, 653823-653824, 655245-655259)
Solanum tuberosum (652480, 652882-652883, 652952-652957, 653687, 653733, 653760, 653830-653831, 654350-654354, 654387, 654449, 654469-654470, 654527, 655075-655076, 655236, 655314-655318)
Solanum tuberosum subsp. *andigenum* (653761)
Solanum verrucosum (653784, 653819)
Solanum x *doddsii* (653755)
Solanum x *michoacanum* (653799)
Solanum yungasense (653757, 653759)
Solenostemon scutellarioides (655303)
Sorbus aria (652860)
Sorbus sambucifolia (652861-652862)
Sorghum bicolor (652943-652946)
Sorghum bicolor subsp. *bicolor* (653411, 653616-653617, 654349, 654495-654496, 655260-655275)
Sorghum bicolor subsp. *drummondii* (653734)
Sorghum bicolor subsp. *verticilliflorum* (653735)
Sorghum hybrid (653736)
Sorghum propinquum (653737)
Sorghum sp. (653738-653739)
Sorghum x *almum* (653740)
Spinacia oleracea (654523-654524, 655243, 655276-655277)
Stipa capillacea (655198)
Stipa przewalskyi (655205)
Stipa sibirica (655129)
Trifolium arvense (655237-655239)
Trifolium aureum (655240-655241)
Trifolium campestre (654508)
Trifolium incarnatum (654999-655007)
Trifolium isthmocarpum (653510-653511)
Trifolium subterraneum (653613-653614)
Triticum aestivum (654514, 654526)
Triticum aestivum subsp. *aestivum* (652450-652453, 652923-652924, 652926-652927, 652930, 652933, 653260, 653509, 653518, 653521, 653527, 653530, 653535, 653707-653716, 653726, 653731, 653832-653833,

653841-653842, 654142-654181, 654183-654188, 654190-654212,
654217-654283, 654285-654289, 654291-654309, 654367, 654384,
654419-654426, 654454, 654518-654521, 655029-655034, 655039, 655042,
655073-655074, 655233-655234, 655242, 655244, 655291, 655312)
Triticum monococcum subsp. *aegilopoides* (654310, 654312-654316, 654320,
654322-654324, 654326-654333, 654335, 654337-654339, 654341-654348)
Triticum timopheevii subsp. *armeniacum* (654340)
Triticum turgidum subsp. *dicoccoides* (654311, 654317-654319, 654321, 654325,
654334, 654336)
Triticum turgidum subsp. *durum* (654182, 654189, 654213-654216, 654284, 654290,
655036-655037, 655352-655518)
Valerianella locusta (652465)
Vicia faba (655319-655328, 655330-655349)
Vicia faba var. *minuta* (655329)
Vicia villosa (654047)
Vigna unguiculata (653132)
Vigna unguiculata subsp. *unguiculata* (654494, 655235)
X *Citrofortunella* sp. (654885)
X *Citrofortunella swinglei* (654837)
X *Coleara* sp. (654895)
X *Triticosecale* sp. (655035, 655038)
Zea mays subsp. *mays* (652866-652874, 652876-652881, 652884, 652887,
653688-653704, 654048-654053, 654095-654141, 654407-654408,
654472-654493, 655016-655024, 655278-655290, 655313)
Zinnia hybrid (653531-653533)
Zoysia japonica (652481, 652947)