P698I



Agricultural Research Service

Plant Inventory No. 199, Part I

Plant Materials Introduced January 1 to June 30, 1990 (Nos. 536645 to 541499)



Inventory 3 Index

Scientific names 675 Common names 681 Acronyms 684

Plant Inventory No. 199 is a listing of plant materials introduced into the U.S. National Plant Germplasm System during calendar year 1990. The Inventory is divided into two parts that encompass PIs 536645 - 546348. This is not a listing of plant material for distribution.

Questions about data organization and proper plant identifications should be directed to the editor:

R.A. Norris, Germplasm Specialist Plant Introduction Office National Germplasm Resources Laboratory U.S. Dept. of Agriculture Agricultural Research Service Beltsville, MD 20705

Other contributors to Plant Inventory 199 included:

Vicki Binstock L.G. Garner Quinn Sinnott Allan K. Stoner G.A. White

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PI 536645. Oryza sativa L. POACEAE Rice

Donated by: Johnson, C.W., Calif. Coop. Rice Res. Fdn., Inc., P.O. Box 306, Biggs, California, United States; and California Agr. Exp. Sta.; and Agricultural Research Service -- USDA. remarks: S-301 Rice. Received January 04, 1990.

origin: United States. origin institute: Calif. Coop. Rice Res. Fdn., Inc., P.O. Box 306, Biggs, California 95917. cultivar: S-301. pedigree: SD7/73-221//M7P-1/3/M7P-5. other id: 85-Y-502. other id: PVP 9000158. source: Pending. group: PVPO. other id: CV-85. group: CSR-RICE. remarks: Smooth, sparsely awned, semidwarf, weakly photoperiod sensitive, and intermediate maturing short-grain type that produces a more translucent sample (less white/green kernels) and superior whole kernel milled grain (% head) than S-101 and S-201. Seed weight 21.1 grams per 1000 brown rice kernels which is 2% larger than S-201 but 14% smaller than S-201. Good resistance to cool temperatures. Cultivar. Seed.

PI 536646. Hordeum vulgare L. POACEAE Barley

Donated by: Baenziger, P.A., Nebraska Agr. Exp. Sta., Dept. of Agronomy, University of Nebraska, Lincoln, Nebraska, United States. remarks: Perkins Barley. Received November 15, 1989.

donor id: NE851808. origin: United States. origin institute: Nebraska Agr. Exp. Sta., Dept. of Agronomy, University of Nebraska, Lincoln, Nebraska 68583. cultivar: PERKINS. pedigree: F6 selection from NE81713 (F3 derived line from Nebar Selection/Dundy). other id: CV-221. source: Crop Sci. 30(6):1355 1990. group: CSR-BARLEY. remarks: Six row, smooth awned feed barley. Spikes erect, moderately dense, and short. Bushel test weight excellent. Straw strength excellent. Moderately resistant to Barley Yellow Dwarf virus. May be susceptible to prevalent races of stem rust found in Nebraska. Winter Annual. Cultivar. Seed.

PI 536647. X Triticosecale sp. POACEAE Triticale

Donated by: Baenziger, P.A., Nebraska Agr. Exp. Sta., University of Nebraska, Dept. of Agronomy, Lincoln, Nebraska, United States. remarks: Newcale Triticale. Received November 15, 1989.

donor id: NE83T12. origin: United States. origin institute: Nebraska Agr. Exp. Sta., University of Nebraska, Dept. of Agronomy, Lincoln, Nebraska 68583. cultivar: NEWCALE. pedigree: 6TA131/6TA131 Dwarf Selection/2/Fain/Centurk 78 (short selection). other id: CV-10. group: CSR-TRITICALE. remarks: Feed grain type with early flowering. Straw strength good. Awns rough, moderately long and brown to black, Floret fertility good. Spikes middense to dense, moderately long, and nodding at maturity. Kernels red, elliptical, large, and slightly wrinkled. 1000 kernel weight and protein content good. Moderately resistant to prevalent races of leaf and stem rusts. Winter Annual. Cultivar. Seed.

PI 536648 to 536649. Erianthus sp. POACEAE

Donated by: Sadakorn, J., Botanical Section, Botany & Weed Science Division, Department of Agriculture, Bangkhen, Bangkok, Thailand. remarks: Received through IBPGR, Rome, Italy. Exploration and Collection of Saccharum spp. in Thailand during 1982-3. Received November 30, 1989.

- PI 536648 donor id: THA 82-34. origin: Thailand. collected: June 12, 1982. collector id: THA 82-34. other id: S10095. locality: Natural habitat, Tambon Se-ga, Amphoe Se-ga, Nongkhai. latitude: 18 deg. 00 min. N. longitude: 103 deg. 00 min. E. elevation: 200m. Perennial. Wild. Cutting.
- PI 536649 donor id: THA 83-122. origin: Thailand. collected:
 January 11, 1983. collector id: THA 83-122. other id:
 S10320. locality: Natural habitat, Ban Pratarbchang,
 Amphoe Phopratarb Chang, Phichit. latitude: 16 deg. 50
 min. N. longitude: 099 deg. 95 min. E. elevation: 60m.
 Perennial. Wild. Cutting.
- PI 536650 to 536656. Saccharum officinarum L. POACEAE Noble cane

Donated by: Sadakorn, J., Botanical Section, Botany & Weed Science Division, Department of Agriculture, Bangkhen, Bangkok, Thailand. remarks: Received through IBPGR, Rome, Italy. Exploration and Collection of Saccharum spp. in Thailand during 1982-3. Received November 30, 1989.

PI 536650 donor id: THA 82-29. origin: Thailand. collected: June 09, 1982. collector id: THA 82-29. other id: S10212. locality: Home garden, Tambon Phon Sai, Amphoe Phon Sai, Roi Et. latitude: 15 deg. 90 min. N. longitude: 103 deg. 50 min. E. elevation: 200m. Perennial. Cultivated. Cutting.

PI 536650 to 536656-continued

- PI 536651 donor id: THA 82-70. origin: Thailand. collected:
 October 10, 1982. collector id: THA 82-70. other id:
 S10213. locality: Home garden, Tambon Paknam, Amphoe
 Muang, Chumphon. latitude: 10 deg. 50 min. N.
 longitude: 098 deg. 20 min. E. elevation: 30m.
 Perennial. Cultivated. Cutting.
- PI 536652 donor id: THA 82-84. origin: Thailand. collected:
 October 23, 1982. collector id: THA 82-84. other id:
 S10215. locality: Home garden, Ban Hua Sai, Amphoe Hua
 Sai, Nakhom Si Tham marat. latitude: 08 deg. 50 min. N.
 longitude: 099 deg. 00 min. E. elevation: 0m.
 Perennial. Cultivated. Cutting.
- PI 536653 donor id: THA 83-136. origin: Thailand. collected:
 January 13, 1983. collector id: THA 83-136. other id:
 S10217. locality: Home garden, Tambon Nai Muang, Amphoe
 Muag, Sukhothai. latitude: 17 deg. 20 min. N.
 longitude: 099 deg. 20 min. E. elevation: 60m.
 Perennial. Wild. Cutting.
- PI 536654 donor id: THA 83-156. origin: Thailand. collected:
 January 15, 1983. collector id: THA 83-156. other id:
 S10219. locality: Home garden, Ban Thung, Amphoe Phan,
 Chiang Rai. latitude: 20 deg. 00 min. N. longitude: 099
 deg. 50 min. E. elevation: 400m. Perennial.
 Cultivated. Cutting.
- PI 536655 donor id: THA 83-185. origin: Thailand. collected:
 January 17, 1983. collector id: THA 83-185. other id:
 S10220. locality: Home garden, sandy soil, Fifth
 village, Amphoe Mae Chan, Chiang Rai. latitude: 20 deg.
 00 min. N. longitude: 099 deg. 50 min. E. elevation:
 400m. Perennial. Cultivated. Cutting.
- PI 536656 donor id: THA 83-187. origin: Thailand. collected:
 January 17, 1983. collector id: THA 83-187. other id:
 S10221. locality: Home garden, Fifth village, Amphoe Mai
 Chan, Chiang Rai. latitude: 20 deg. 00 min. N.
 longitude: 099 deg. 50 min. E. elevation: 400m.
 Perennial. Cultivated. Cutting.

PI 536657. Saccharum sinense Roxb. POACEAE

Donated by: Sadakorn, J., Botanical Section, Botany & Weed Science Division, Department of Agriculture, Bangkhen, Bangkok, Thailand. remarks: Received through IBPGR, Rome, Italy. Exploration and Collection of Saccharum spp. in Thailand during 1982-3. Received November 30, 1989.

PI 536657-continued

donor id: THA 82-90. origin: Thailand. collected:
October 26, 1982. collector id: THA 82-90. other id:
S10216. locality: Home garden, light sandy soil, Nong Wa village, Muang District, Phatthalung Province. latitude:
70 deg. 50 min. N. longitude: 099 deg. 50 min. E. elevation: 100m. Perennial. Cultivated. Cutting.

PI 536658 to 536674. Saccharum spontaneum L. POACEAE

Donated by: Sadakorn, J., Botanical Section, Botany & Weed Science Division, Department of Agriculture, Bangkhen, Bangkok, Thailand. remarks: Received through IBPGR, Rome, Italy. Exploration and Collection of Saccharum spp. in Thailand during 1982-3. Received November 30, 1989.

- PI 536658 donor id: THA 82-4. origin: Thailand. collected: May 14, 1982. collector id: THA 82-4. other id: S10081. locality: Roadside, natural habitat, Tambon Parkplee, Amphoe Parkplee, Nakhon Nayok. latitude: 14 deg. 20 min. N. longitude: 100 deg. 80 min. E. elevation: 0m. Perennial. Wild. Cutting.
- PI 536659 donor id: THA 82-16. origin: Thailand. collected: May 14, 1982. collector id: THA 82-16. other id: S10089. locality: Roadside, natural habitat, Tambon Kabin, Amphoe Kabin Buri, Prachin Buri. latitude: 14 deg. 10 min. N. longitude: 102 deg. 00 min. E. elevation: 10m. Perennial. Wild. Cutting.
- PI 536660 donor id: THA 82-44. origin: Thailand. collected: June 19, 1982. collector id: THA 82-44. other id: S10097. locality: Natural habitat, Tambon Nai Nuang, Amphoe Nuang, Sara Buri. latitude: 14 deg. 60 min. N. longitude: 100 deg. 50 min. E. elevation: 20m. Perennial. Wild. Cutting.
- PI 536661 donor id: THA 82-53. origin: Thailand. collected: June 30, 1982. collector id: THA 82-53. other id: S10101. locality: Natural habitat, Tambon Tamaka, Amphae Thamara, Kanchanaburi. latitude: 14 deg. 50 min. N. longitude: 098 deg. 25 min. E. elevation: 0m. Perennial. Wild. Cutting.
- PI 536662 donor id: THA 82-54. origin: Thailand. collected: June 30, 1982. collector id: THA 82-54. other id: S10102. locality: Natural habitat, Tambon Nai Muang, Amphoe Muang, Nakhon Pathom. latitude: 14 deg. 00 min. N. longitude: 099 deg. 20 min. E. elevation: 0m. Perennial. Wild. Cutting.

- PI 536663 donor id: THA 82-56. origin: Thailand. collected: June 30, 1982. collector id: THA 82-56. other id: S10103. locality: Natural habitat, Tambon Ban Phong, Amphoe Ban Phong, Ratchaburi. latitude: 13 deg. 50 min. N. longitude: 098 deg. 50 min. E. elevation: Om. Perennial. Wild. Cutting.
- PI 536664 donor id: THA 82-60. origin: Thailand. collected: July 05, 1982. collector id: THA 82-60. other id: S10107. locality: Natural habitat, Tambon Samut Sakhon, Amphoe Nuang, Samut Sakhon. latitude: 13 deg. 60 min. N. longitude: 099 deg. 60 min. E. elevation: 0m. Perennial. Wild. Cutting.
- PI 536665 donor id: THA 82-65. origin: Thailand. collected:
 October 10, 1982. collector id: THA 82-65. other id:
 S10111. locality: Roadside, natural habitat, Ban Phra
 Thomphon, Amphoe Nuang, Chumphon. latitude: 10 deg. 50
 min. N. longitude: 098 deg. 20 min. E. elevation: 20m.
 Biennial. Wild. Cutting.
- PI 536666 donor id: THA 82-67. origin: Thailand. collected:
 October 10, 1982. collector id: THA 82-67. other id:
 S10113. locality: Roadside, natural habitat, Ban
 Siebyuan, Amphoe Muang, Chumphon. latitude: 10 deg. 50
 min. N. longitude: 098 deg. 20 min. E. elevation: 20m.
 Perennial. Wild. Cutting.
- PI 536667 donor id: THA 82-69. origin: Thailand. collected:
 October 10, 1982. collector id: THA 82-69. other id:
 S10114. locality: Foot of bridge, natural habitat, light sandy soil, Ban Tha Sae, Chumphon. latitude: 10 deg. 50 min. N. longitude: 098 deg. 20 min. E. elevation: 30m.
 Perennial. Wild. Cutting.
- PI 536668 donor id: THA 83-112. origin: Thailand. collected:
 January 09, 1983. collector id: THA 83-112. other id:
 S10131. locality: Roadside, natural habitat, Tambon
 Parktang, Amphoe Muang, Phichit. latitude: 16 deg. 30
 min. N. longitude: 099 deg. 90 min. E. elevation: 60m.
 Perennial. Wild. Cutting.
- PI 536669 donor id: THA 83-129. origin: Thailand. collected:
 January 12, 1983. collector id: THA 83-129. other id:
 S10167. locality: Roadside, natural habitat, Tambon Wang
 Thong, Amphoe Wang Thong, Phitsanulok. latitude: 17 deg.
 00 min. N. longitude: 100 deg. 00 min. E. elevation:
 60m. Perennial. Wild. Cutting.

PI 536658 to 536674-continued

- PI 536670 donor id: THA 83-132. origin: Thailand. collected:
 January 12, 1983. collector id: THA 83-132. other id:
 S10170. locality: Roadside, natural habitat, Tambon Wang
 Thong, Amphoe Wang Thong, Phitsanulok. latitude: 17 deg.
 00 min. N. longitude: 100 deg. 00 min. E. elevation:
 60m. Perennial. Wild. Cutting.
- PI 536671 donor id: THA 83-146. origin: Thailand. collected:
 January 14, 1983. collector id: THA 83-146. other id:
 S10171. locality: Roadside, natural habitat, Tambon
 Rongwang, Amphoe Rongkwang Phrae. latitude: 18 deg. 30
 min. N. longitude: 099 deg. 55 min. E. elevation: 200m.
 Perennial. Wild. Cutting.
- PI 536672 donor id: THA 83-149. origin: Thailand. collected:
 January 15, 1983. collector id: THA 83-149. other id:
 S10173. locality: Roadside, natural habitat, Tambon
 Muang ngao, Amphoe Ngao Lampong. latitude: 18 deg. 50
 min. N. longitude: 099 deg. 00 min. E. elevation: 300m.
 Perennial. Wild. Cutting.
- PI 536673 donor id: THA 83-171. origin: Thailand. collected:
 January 16, 1983. collector id: THA 83-171. other id:
 S10189. locality: Roadside, natural habitat, Tambon Mae
 Sai, Amphoe Mae Sai Chiang RAI. latitude: 20 deg. 00
 min. N. longitude: 090 deg. 55 min. E. elevation: 400m.
 Perennial. Wild. Cutting.
- PI 536674 donor id: THA 83-182. origin: Thailand. collected:
 January 17, 1983. collector id: THA 83-182. other id:
 S10195. locality: Roadside, natural habitat, Ban Pha ha,
 Amphoe Mae Chan, Chang Rai. latitude: 20 deg. 00 min. N.
 longitude: 099 deg. 50 min. E. elevation: 400m.
 Perennial. Wild. Cutting.
- PI 536675. Prunus avium (L.) L. ROSACEAE Cherry

Donated by: Hough, L.F., Dept. of Horticulture, Rutgers University, P.O. Box 231, Blake Hall, New Jersey, United States. Received September 10, 1970.

origin: Romania. cultivar: H-BISTRITA XXX/1-4. other id: Q 19577. Cultivar. Budwd.

PI 536676. Prunus persica (L.) Batsch ROSACEAE Peach

Donated by: F.P. Matthews Ltd., Worcestershire, England, United Kingdom. Received August 09, 1976.

PI 536676-continued

origin: United Kingdom. cultivar: BELLEGARDE. other id:
Q 20796. Cultivar. Budwd.

PI 536677 to 536678. Prunus hybrid ROSACEAE Peach

Donated by: Institut Sadowuictwa, Pomologiczna, Poland. Received August 19, 1976.

PI 536677 donor id: No. 397/VIII-4. origin: Poland. pedigree: Chinese x cultivar/x/open. other id: Q 20808. Cultivated. Budwd.

PI 536678 donor id: No. 436/VIII-43. origin: Poland. pedigree: Chinese x cultivar/x/open. other id: Q 20809. Cultivated. Budwd.

PI 536679 to 536680. Prunus armeniaca L. ROSACEAE Apricot

Donated by: Academie de Stiinte Agricole si Silvice, Institutul de Cercetari, Pitesti (Maracinani), Romania. Received August 20, 1976.

PI 536679 origin: Romania. cultivar: MAMAIA. other id: Q 20812. Cultivar. Budwd.

PI 536680 origin: Romania. cultivar: ROSII DE MARCULESTI. other id: Q 20813. Cultivar. Budwd.

PI 536681. Prunus persica (L.) Batsch ROSACEAE Peach

Donated by: Instytut Sadownictwa, Pomolgiczna, Poland. Received August 19, 1976.

origin: Poland. cultivar: KIJEWSKA ZAPALA. other id: Q 20822. Cultivar. Budwd.

PI 536682. Prunus persica (L.) Batsch ROSACEAE Peach

Donated by: Dept. of Agricultural Technical Services, Division of Seed Control, Pretoria, South Africa. Received February 12, 1979.

origin: South Africa. cultivar: IMPERONI. other id: Q
21578. Cultivar. Budwd.

PI 536683. Prunus armeniaca L. ROSACEAE Apricot

Donated by: Fruit & Fruit Technology Res. Inst., Dept. of Agr. Tech. Services, Stellenbosch, South Africa. Received May 07, 1979.

PI 536683-continued

origin: South Africa. cultivar: PALSTEYN. pedigree: Verdun/Peeka. other id: Q 21697. remarks: Trees vigorous with spreading growth habit. Fruit 81 grams (average), orange-yellow when ripe sometimes red blush. Flesh dark-orange coarse round with marked suture, cheeks somewhat flattened. Stone free when ripe, oval. Above average fruit size, excellent keeping quality. Suitable for export. Canned product attractive and of good quality. Dried product too dark. Not as susceptible to Eutypa die-back. Cultivar. Budwd.

PI 536684. Prunus triloba Lindley ROSACEAE Almond

Donated by: Royal Botanical Garden, Inverleith, Edinburgh, Scotland, United Kingdom. Received February 25, 1980.

origin: United Kingdom. other id: Q 21840. Cultivated.
Scion.

PI 536685. Prunus persica (L.) Batsch ROSACEAE Peach

Donated by: Jolly, P.R., Dept. of Agricultural Technical Services, Fruit & Fruit Technology Research Inst., Stellenbosch, South Africa. Received May 01, 1980.

origin: South Africa. cultivar: DE WET. pedigree: NJC 18/21/SN45/3. other id: Q 21924. remarks: Tree, semi-upright. Early maturing. Fruit round, slightly pointed (especially in warm areas), about 60mm in diameter, yellow with a red stripy blush. Flesh yellow with greenish tint, medium to rough texture, melting and firm. Stone clinging to semi-free in ripe fruit, medium sized, rough, grooved and oval with a point. Stores well. Probably more suited for colder areas. Cultivar. Budwd.

PI 536686. Prunus armeniaca L. ROSACEAE Apricot

Donated by: Scorza, R., Appalachian Fruit Research Station, USDA-ARS, Route 2, Box 45, Kearneysville, West Virginia, United States. Received August 07, 1981.

origin: Hungary. cultivar: CEGLED DE MAMUI. other id: Q
22600. Cultivar. Budwd.

PI 536687. Prunus persica (L.) Batsch ROSACEAE Peach

Donated by: Yim, Y.J., Horticultural Experiment Station, Rural Development Administration, Suweon, Korea. Received October 19, 1981.

origin: Korea. cultivar: YUMYEONG. other id: Q 22695.
Cultivar. Budwd.

PI 536688 to 536691. Prunus domestica L. ROSACEAE Plum

Donated by: Kapetanovic, N., Poljoprivredni Fakultet, 71000 Sarajevo, Zagrevaika 18, Yugoslavia. remarks: Received through M.M. Thompson, Oregon State University, Corvallis, Oregon. Received March 05, 1982.

- PI 536688 origin: Yugoslavia. cultivar: POZEGACA D-13. other id: Q 22870. Cultivar. Budwd.
- PI 536689 origin: Yugoslavia. cultivar: POZEGACA P-24. other id: 0 22872. Cultivar. Budwd.
- PI 536690 origin: Yugoslavia. cultivar: POZEGACA P-25. other id: 0 22873. Cultivar. Budwd.
- PI 536691 origin: Yugoslavia. cultivar: POZEGACA. other id: Q 22874. Cultivar. Budwd.
- PI 536692 to 536864. Lactuca sativa L. ASTERACEAE Lettuce

Donated by: National Seed Storage Laboratory, Colorado State University, Fort Collins, Colorado, United States. remarks: Cultivars from various donors accumulated at NSSL. Received December 01, 1989.

- PI 536692 origin: United States. cultivar: SUMMERLONG. remarks:
 Maturity 70 days. Heads compact, round. Hearts tender,
 sweet, even in hot weather. Very reliable. Annual.
 Cultivar. Seed.
- PI 536693 origin: United States. cultivar: A 36. remarks:
 Maturity 85 days. Heads round, compact, produced on a
 large frame. Leaves large, lightly crumpled, dark (outer
 leaves). Good base. Some tipburn resistance. Annual.
 Cultivar. Seed.
- PI 536694 origin: United States. cultivar: ALL YEAR ROUND.
 remarks: Maturity 70 days. Dependable butterhead type.
 Heads globular; well-formed even when weather is so warm that most varieties fail. Annual. Cultivar. Seed.

- PI 536695 origin: United States. cultivar: ARCTIC KING. remarks:
 Maturity 75 days, butterhead type. Heads equal in size to
 White Boston, but leaves are lighter green and more
 crumpled. Annual. Cultivar. Seed.
- PI 536696 origin: United States. cultivar: BELLAVERDE GREAT LAKES LMC. remarks: Maturity 90 days. Seed white. Special Southwestern strain for spring and fall production. Annual. Cultivar. Seed.
- PI 536697 origin: United States. cultivar: BIBB. remarks:
 Maturity 57 days. Heads small, excellent quality. Leaves smooth, dark green. Well adapted to middle south.
 Annual. Cultivar. Seed.
- PI 536698 origin: United States. cultivar: BIG BOSTON. remarks:
 Maturity 75 days. Heads large. Leaves bright green, very tender. Annual. Cultivar. Seed.
- PI 536699 origin: United States. cultivar: BLACK-SEEDED BATH COS. remarks: Maturity 75 days. European variety. Heads small, dark, reddish brown. Annual. Cultivar. Seed.
- PI 536700 origin: United States. cultivar: BLACK-SEEDED SIMPSON. remarks: Maturity 45 days. Excellent quality. Leaves curled, crisp, very tender can be used from the time the plant is small. Quick-growing, dependable. Good for home garden. Annual. Cultivar. Seed.
- PI 536701 origin: United States. cultivar: BURPEEANA. remarks:
 Maturity 75 days. Heads small. Leaves loosely folded;
 outer leaves dark green, sometimes slightly tinged or
 marked with brown; inside leaves blanch to golden yellow.
 Crisp, without bitterness. Annual. Cultivar. Seed.
- PI 536702 origin: United States. cultivar: BURPEE GREENHEART.
 remarks: Maturity 45 days. Special strain of Grand
 Rapids; stands longer before bolting to seed. Leaves
 lighter green than Grand Rapids; margins finely frilled
 and deeply cut, tender, sweet and crispy. Good during
 spring, summer and fall. Annual. Cultivar. Seed.
- PI 536703 origin: United States. cultivar: CALMAR. remarks:
 Matures about 2 days later than Great Lakes. Head color
 medium green. Head shape round with good cover. Head size
 possibly slightly larger than Great Lakes. Solidity good,
 same as popular Great Lakes strains. Leaf texure similar
 to that possessed by popular Great Lakes strains.
 Resistant to tipburn. Resistance to downy mildew high.
 Annual. Cultivar. Seed.

- PI 536704 origin: United States. cultivar: CHICKEN LETTUCE.
 remarks: Maturity 55 days. Plants 3 to 4 feet high.
 "Loaded" with leaves that can be pulled like kale. After cutting it keeps on growing. Annual. Cultivar. Seed.
- PI 536705 origin: United States. cultivar: CLIMAX. remarks:
 Maturity 90-100 days. Developed for winter production in
 Southwest. Plant large, vigorous. Heads exceptionally
 well formed, covered with an abundance of large wrapper
 leaves. Base well filled, attractive with good green
 color. Annual. Cultivar. Seed.
- PI 536706 origin: United States. cultivar: CONTINUITY. remarks:
 Maturity 70 days. Butterhead type particularly used for
 home and market gardens. Heads formed even under rather
 adverse weather conditions. Plant medium small; deep
 green overlaid with dark brown; form firm well blanced
 head. Annual. Cultivar. Seed.
- PI 536707 origin: United States. cultivar: CORNELL 456. remarks:
 Maturity 76 days. Good summer use, especially on muck but
 also on upland. Fairly early, smaller and firmer than
 Great Lakes 659. Resists bolting and tipburn well. Leaves
 well-crumpled. Heads solid, crisp, of fine color and
 quality. Annual. Cultivar. Seed.
- PI 536708 origin: United States. cultivar: COS/ROMAINE. remarks:
 Maturity 76 days. Plants upright. Heads firm, about 10
 inches high. Leaves dark green. Tolerant of mosaic and
 tipburn. Stands longer without bolting. Hearts blanch
 nearly white. Recommended for both home use and
 commercial crops on muck or upland. Annual. Cultivar.
 Seed.
- PI 536709 origin: United States. cultivar: COSBERG. Annual. Cultivar. Seed.
- PI 536710 origin: United States. cultivar: CRISP AS ICE. remarks:
 Maturity 74 days. Head small, dark green, overlaid with
 dark brown crumpled leaves. Does not get bitter in hot
 weather. Annual. Cultivar. Seed.
- PI 536711 origin: United States. cultivar: DARK GREEN BOSTON
 MARKET. remarks: Maturity 73 days, a medium early
 butterhead type. Plants medium size, compact. Outer
 leaves quite numerous, short erect, waved slightly but
 coarsly rumpled, medium dark green. Heads medium size,
 compact, well covered. Hearts well blanched, succulent,
 excellent texture and flavor. Annual. Cultivar. Seed.

- PI 536712 origin: United States. cultivar: DEERTONGUE/MATCHLESS. remarks: Maturity 80 days. Heads excellent quality with thick, succulent mid-rib. Leaves oblong to triangular in shape with rounded tip, slightly savoyed. Plants upright, compact. Heat tolerance, slow to bolt. Annual. Cultivar. Seed.
- PI 536713 origin: United States. cultivar: GREAT LAKES EMERALD.
 remarks: Maturity 75-80 days. Medium green color with
 light savoy to outer leaves and head, giving it a slight
 Imperial look. Head well-rounded with excellent head
 protection. Base very smooth with good green color almost
 to stem when cut for market. Well adapted to Southwest
 desert regions for early winter maturing. Annual.
 Cultivar. Seed.
- PI 536714 origin: United States. cultivar: EARLY CURLED SIMPSON. remarks: Maturity 50 days. Good even under adverse conditions. Head well-blanched, curly, loose; early, crisp and tender. Especially adapted for sowing thickly in rows and cutting when young. Annual. Cultivar. Seed.
- PI 536715 origin: United States. cultivar: EXPRESS COS. remarks:
 Maturity 70 days. Leaves dark green. The "most dwarf" and
 earliest of all. Self-closing. Delicious flavor. Annual.
 Cultivar. Seed.
- PI 536716 origin: United States. cultivar: FELTHAM KING. remarks:
 Maturity 70 days. Butterhead with medium dark green
 leaves similar to Wayahead. Head medium size. Long
 standing. Annual. Cultivar. Seed.
 - PI 536717 origin: United States. cultivar: GOLDEN STATE A.
 remarks: Maturity 90-100 days. Plant bright green. Head
 very well formed, amply covered by wrapper leaves which
 are slightly frilled and medium savoyed. Base well-filled
 with good color. Annual. Cultivar. Seed.
 - PI 536718 origin: United States. cultivar: GOLDEN STATE B.
 remarks: Maturity 90-95 days. Plants slightly grey-green.
 Head well formed with ample amount of wrapper leaves
 which are thick and less frilled at tips, giving it a
 smoother look than is found in either Golden State A or
 Golden State C. Good base color. Annual. Cultivar.
 Seed.

- PI 536719 origin: United States. cultivar: GRAND RAPIDS. remarks:
 Maturity 45 days. Leaves light green, finely blistered,
 fringed at edges. Quick growing. Originally developed for
 greenhouse crops, but has proved superior outdoors also.
 Plant highly uniform, vigorous, with a "heavy compact
 growth". Resistant to tipburn. Annual. Cultivar. Seed.
- PI 536720 origin: United States. cultivar: GOLDEN QUEEN. remarks:
 Maturity 65 days. Butterhead type; small size. Outer
 leaves light yellowish-green, slightly crumpled; edges
 smooth. Heads firm, very early. Annual. Cultivar.
 Seed.
- PI 536721 origin: United States. cultivar: GRAND RAPIDS H 5-4. Annual. Cultivar. Seed.
- PI 536722 origin: United States. cultivar: GRAND RAPIDS RES 561.
 remarks: Maturity 50 days. Tendency to form heads when
 grown outdoors. Leaves more savoyed than regular Grand
 Rapids. Annual. Cultivar. Seed.
- PI 536723 origin: United States. cultivar: GRAND RAPIDS U S NO 1.
 remarks: Maturity 42 days. Similar to Grand Rapids,
 except that leaf margins are a little more deeply cut and
 heavily frilled. Color is a little duller and lighter
 green. Recommended for general planting as it stands
 longer without bolting. Annual. Cultivar. Seed.
- PI 536724 origin: United States. cultivar: GREAT LAKES GEM.
 remarks: Maturity 90-100 days. Outstanding for its
 uniformity of size and maturity. Heads round, compact,
 well protected by large, erect outer leaves that are dark
 green. Excellent flat ribbed base that does not look
 blanched when packed. Slow bolting. Strong resistance to
 tipburn and sunburn. Adapted to winter growing in Texas
 and Southwest, and as a spring and summer crop. Annual.
 Cultivar. Seed.
- PI 536725 origin: United States. cultivar: GREAT LAKES 54.
 remarks: Maturity 80 days. Seed white. Uniform in type,
 color, size and season. In California trials it has the
 most vigorous and darkest green plants of all Great Lakes
 strains. Annual. Cultivar. Seed.
- PI 536726 origin: United States. cultivar: GREAT LAKES R-200-95 LMC. remarks: Maturity 82-100 days. Seed white. Large, round, firm. Bright green; well folded. Tipburn tolerant. A superior main or warm weather variety. Grown extensively throughout the country. Fine shipper. Annual. Cultivar. Seed.

- PI 536727 origin: United States. cultivar: GREAT LAKES R-200.
 remarks: Maturity 90-100 days. Foliage bright green,
 larger outer leaves which furnish good protection for the
 large, round crisp head. Well adapted to Pacific Coast.
 Used by home gardeners and commercial growers. Annual.
 Cultivar. Seed.
- PI 536728 origin: United States. cultivar: GREAT LAKES R-200-95.
 remarks: Maturity 82-100 days. Seed white. Large, round
 firm. Bright green; well folded. Tipburn tolerant. A
 superior main or warm weather variety. Grown extensively
 throughout the country. Fine shipper. Annual. Cultivar.
 Seed.
- PI 536729 origin: United States. cultivar: GREAT LAKES SHIPPER 212 LMC. remarks: Maturity 90 days. Seed white. Heads well formed; good green color. For Southwest and Pacific Coast. Annual. Cultivar. Seed.
- PI 536730 origin: United States. cultivar: GREAT LAKES 366.
 remarks: Maturity 80 days. Seeds white. Vigorous, good
 size in cool weather. Resistant to tipburn, therefore
 also excellent for summer harvest. More uniform in plant
 type, color and head size than regular Great Lakes.
 Annual. Cultivar. Seed.
- PI 536731 origin: United States. cultivar: GREAT LAKES 366 A. remarks: Maturity 85-90 days, medium/early, Great Lakes type. Seeds white. Heads large, round, compact on heavy frame. Outer leaves dark green, lightly crumpled and fringed. Has good head protection and some resistance to tipburn. Excellent shipper. Annual. Cultivar. Seed.
- PI 536732 origin: United States. cultivar: GREAT LAKES 407.
 remarks: Maturity 90-100 days. Seed white. Especially
 selected for its resistance to tipburn, sunburn, rain.
 Color bright Outer leaves large, erect, which protect
 firm heads during extremes in weather. Recommended for
 Southwest winter growing areas, local market and garden.
 Annual. Cultivar. Seed.
- PI 536733 origin: United States. cultivar: GREAT LAKES 659.
 remarks: Maturity 80-85 days when planted in August or
 early Sep- tember; 110-120 when planted for spring or
 summer harvest. Seeds white. Heads large, round, very
 firm, completely covered by over-folding, extra fringed
 dark green leaves. Particularly resistant to cold damage,
 sunburn or tipburn. One of the most versatile and widely
 planted of all the Great Lake types. Good in South and
 Southwest areas. Annual. Cultivar. Seed.

- PI 536734 origin: United States. cultivar: GREAT LAKES 660.
 remarks: Maturity 85 days. Seeds white. Well adapted to comercial shipping winter garden areas of Southwest.
 Heads large, dark green, well formed, well protected by abundance of wrapper leaves. Base excellent green color. Seeds germinate well under warm climatic conditions. Annual. Cultivar. Seed.
- PI 536735 origin: United States. cultivar: GREAT LAKES J STRAIN LMC. Annual. Cultivar. Seed.
- PI 536736 origin: United States. cultivar: GREAT LAKES 659 LMC. remarks: Maturity 88 days. Seeds white. Adapted for Southwest and Northern muck areas. Annual. Cultivar. Seed.
- PI 536737 origin: United States. cultivar: GREAT LAKES SHIPPER STRAIN. remarks: Maturity 90 days. Seeds white. Heads well formed; good green color. Adapted for Southwest and Pacific Coast. Annual. Cultivar. Seed.
- PI 536738 origin: United States. cultivar: HANSON. remarks:
 Maturity 80 days. Seeds white. Heart large round, light
 green, white crisp, sweet. Very hardy. Annual.
 Cultivar. Seed.
- PI 536739 origin: United States. cultivar: HUBBARDS MARKET.
 remarks: Maturity 66 days. Seeds white. Head medium size,
 rather globular, firm. Leaves dark green, slightly
 crumpled, but straight edged. Heart buttery and sweet.
 Good for home and market gardens, also for cold frame
 culture. Annual. Cultivar. Seed.
- PI 536740 origin: United States. cultivar: IMPERIAL 17. remarks: Similar to Imperial 13. Heads conical, large with spirally arranged dark green wrapper leaves. Regionally adapted to winter culture in Imperial Valley of California. Resistant to brown blight. Annual. Cultivar. Seed.
- PI 536741 origin: United States. cultivar: IMPERIAL 101. remarks:
 Maturity 85 days. Seeds white. Large, cool weather
 variety used for spring harvest along Central California
 Coast and for winter harvest in Imperial Valley. Plants
 vigorous, dark green. Outer leaves numerous, thick,
 coarsely crumpled. Heads large, well covered, heavy.
 Excellent quality. Slightly larger than Imperial 615.
 Annual. Cultivar. Seed.

- PI 536742 origin: United States. cultivar: IMPERIAL 847. remarks:
 Maturity 84 days. Better adapted than other Imperial
 strains for use in warm weather in east and south. Heads
 medium large, fairly hard, crisp. Leaves relatively
 smooth, thick, giving good head protection. Resistant to
 brown blight. Annual. Cultivar. Seed.
- PI 536743 origin: United States. cultivar: IMPERIAL 850. remarks: NSL. Annual. Cultivar. Seed.
- PI 536744 origin: United States. cultivar: MATCHLESS/DEER TONGUE. remarks: Maturity 60 days. Leaves long pointed, thick, dark. Plant grows upright, forming tight cluster. Ribs crisp, blanches well at the center. Quality rated almost equal to new Bibb types. Stands well without bolting. Good for summer use. Annual. Cultivar. Seed.
- PI 536745 origin: United States. cultivar: MAY KING. remarks:
 Maturity 63 days. Very early variety. Outer leaves tinged
 with brown, which fold close, permitting close planting
 in frames. Hearts tender, yellow. Annual. Cultivar.
 Seed.
- PI 536746 origin: United States. cultivar: MIGNONETTE. Annual. Cultivar. Seed.
- PI 536747 origin: United States. cultivar: MIGNONETTE GREEN.
 remarks: Maturity 65 days. Similar to Mignonette in size,
 shape and general habit, but color is deep green, free of
 brown tinge. Slower to bolt than regular Mignonette.
 Grown largely in tropics. Leaves frilled. Heart globular
 and firm. Annual. Cultivar. Seed.
- PI 536748 origin: United States. cultivar: NEW YORK. remarks:
 Maturity 80 days. Heads large, round with tightly folded
 dark green leaves. Interior well blanched, tender and
 flavorful. Seeds white. Annual. Cultivar. Seed.
- PI 536749 origin: United States. cultivar: NEW YORK P W NO 55. Annual. Cultivar. Seed.
- PI 536750 origin: United States. cultivar: NEW YORK NO 515.
 remarks: Maturity 81 days. Similar in habit and type of
 plant to New York. Plants medium size, compact, light
 bright green. Head leaves upright at early stages of
 growth, but at maturity heads are round and well formed.
 Heat tolerance. Annual. Cultivar. Seed.

- PI 536751 origin: United States. cultivar: OAK LEAF. remarks:
 Maturity 45 days. Leaves delicate, tender, shaped
 something like oak leaves and grow close together in a
 compact plant. Leaves may be cut repeatedly. Stands well
 without bolting. Fine for all seasons. Annual.
 Cultivar. Seed.
- PI 536752 origin: United States. cultivar: OROVERDE GREAT LAKES. Annual. Cultivar. Seed.
- PI 536753 origin: United States. cultivar: PENNLAKE. remarks:
 Maturity 72 days. Valuable for early crops on upland.
 Heads good-sized, compact, slightly flattened, uniform in
 type and maturity. Leaves moderately blistered and
 fringed. Annual. Cultivar. Seed.
- PI 536754 origin: United States. cultivar: PREMIER GREAT LAKES. remarks: Maturity 75 days. Leaves smoother and margins plainer and lighter green than other Great Lakes. Heads large, firm and uniform. Annual. Cultivar. Seed.
- PI 536755 origin: United States. cultivar: PRIMAVERDE GREAT LAKES. Annual. Cultivar. Seed.
- PI 536756 origin: United States. cultivar: GREAT LAKES PHOENIX.
 remarks: Maturity 90-100 days. Heads large, exceptionally
 firm and solid, well protected by thick, heavy wrapper
 leaves which are rather erect in growth. Base well
 filled. Particularly adapted to Arizona and California
 winter growing lettuce and has given excellent results as
 a spring and summer crop. Annual. Cultivar. Seed.
- PI 536757 **origin:** United States. **cultivar:** PRIZEHEAD. Annual. Cultivar. Seed.
- PI 536758 origin: United States. cultivar: PROGRESS. remarks:
 Maturity 82 days. Distinct in appearance, in season with
 Imperial No. 44. Leaves thicker, more savoyed and more
 resistant to tipburn. Foliage medium dark glossy green.
 Heads large, round and tightly folded. Annual.
 Cultivar. Seed.
- PI 536759 origin: United States. cultivar: RED COS. remarks:
 Maturity 75 days. Plants mahogany red wherever exposed to
 the sun. Hearts deep, creamy yellow splotched with red.
 Holds its red color well; very tender and sweet with
 excellent flavor. Never bitter. Annual. Cultivar.
 Seed.

- PI 536760 origin: United States. cultivar: RED SALAD BOWL.
 remarks: Maturity 50 days. Similar to Salad Bowl but has
 bronze-red color wherever exposed to sun. Sweet and
 tender. For home and market gardeners. Annual.
 Cultivar. Seed.
- PI 536761 origin: United States. cultivar: RUBY. remarks:
 Maturity 45 days. Leaves crumpled/savoyed, frilled, deep
 red color. Quality is good if picked young, crisp and
 tender. A rather slow bolting Grand Rapids type with an
 unusually intense red color. Annual. Cultivar. Seed.
- PI 536762 origin: United States. cultivar: SALAD BOWL. remarks:
 Maturity 48 days. Leaves wavy, notched, closely set on
 the short center stems; tender, sweet. Holds up well in
 summer heat. Good for home gardens. Annual. Cultivar.
 Seed.
- PI 536763 origin: United States. cultivar: SALAD TRIM. remarks:
 Maturity 50-60 days. Leaves glossy deep bronze-red;
 fairly broad, lateral in growth and of fine flavor and crispness. Slow bolting. Excellent for market or garden.
 Annual. Cultivar. Seed.
- PI 536764 origin: United States. cultivar: SLOBOLT. remarks:
 Maturity 48 days. Resembles Grand Rapids but stands two
 to three weeks longer. Remains dwarf and compact in hot
 weather, rather than running up to seed, and produces
 thick cluster of leaves in the center. Outer leaves may
 be picked off as they grow large enough and plant will
 continue to produce fresh leaves. For use in greenhouses
 and outdoors. Annual. Cultivar. Seed.
- PI 536765 origin: United States. cultivar: SWEETHEART. remarks:
 Maturity 75 days. Seed black. Quality large, fine. Heat
 tolerance. Annual. Cultivar. Seed.
- PI 536766 origin: United States. cultivar: TENDERGREEN. Annual. Cultivar. Seed.
- PI 536767 origin: United States. cultivar: TOM THUMB. remarks:
 Maturity 60 days. Small butterhead type used in Europe
 for forcing. Leaves dark green, very crumpled. Annual.
 Cultivar. Seed.
- PI 536768 origin: United States. cultivar: VALVERDE M R. Annual. Cultivar. Seed.

- PI 536769 origin: United States. cultivar: WALDMANS GREEN.
 remarks: Maturity 45 days. Superior Grand Rapids type,
 with deep rich green color. Vigorous growth. Plants
 heavy. Leaves deeply frilled and ruffled. Excellent for
 greenhouse or outdoors. Annual. Cultivar. Seed.
- PI 536770 origin: United States. cultivar: WAYAHEAD. remarks:
 Maturity 70 days. Seeds white. Medium size butterhead
 type. Heads very hard and compact; medium dark green.
 Popular in England. Annual. Cultivar. Seed.
- PI 536771 origin: United States. cultivar: WHITE BOSTON MOSAIC TESTED. remarks: Maturity 68 days. Leaves smooth, lighter colored than Dark Green Boston, yet still very tender. Heads fine, tightly folded. Performs best in cooler weather. Annual. Cultivar. Seed.
- PI 536772 origin: United States. cultivar: WHITE PARIS
 SELF-FOLDING COS. remarks: Maturity 70 days. Seeds
 white. Plants medium large and upright. Outer leaves
 medium light green, spoon-formed, straight-edged. Heads
 upright, loaf-shaped, well folded, firm, 8-9 inches tall.
 Annual. Cultivar. Seed.
- PI 536773 origin: United States. cultivar: WINTERCROP. remarks:
 Maturity 75 days. Seeds white. Very hardy, early, compact
 variety for sowing in England. Annual. Cultivar. Seed.
- PI 536774 origin: United States. cultivar: WINTER DENSITY.
 remarks: Maturity 80 days. Seeds white. Semi-cos type.
 Leaves tight, crisp bunch at the heart. Very brittle and sweet. Popular in England. Annual. Cultivar. Seed.
- PI 536775 origin: United States. cultivar: WOODS CABBAGE.
 remarks: Maturity 65 days. Heads medium large, firm,
 blanches nicely. Quality excellent with sweet, buttery
 flavor. May be planted in early spring, summer, fall.
 Fine for forcing in hotbed. Annual. Cultivar. Seed.
- PI 536776 origin: United States. cultivar: NO 749. remarks:
 Maturity 82 days. Seeds white. Plants are comparible in size and type to Imperial 615 but are slightly darker green and deeper in shape. Particularly suited to the Yuma, Arizona area. Annual. Cultivar. Seed.

- PI 536777 origin: United States. cultivar: BURPEES CELTUCE.
 remarks: Combines uses of celery and lettuce. Young
 leaves have four times the vitamin C content of lettuce.
 When plants are young, the leaves may be used as lettuce
 or as boiling "greens", but its chief value is the heart
 of the central stem which may be eaten raw or cooked in
 the same way that celery would be prepared. Grown the
 same as lettuce. Annual. Cultivar. Seed.
- PI 536778 origin: United States. cultivar: EMPIRE. Annual. Cultivar. Seed.
- PI 536779 origin: United States. cultivar: MERIT. Annual. Cultivar. Seed.
- PI 536780 origin: United States. cultivar: LAKELAND. Annual. Cultivar. Seed.
- PI 536781 origin: United States. cultivar: BRONZE BEAUTY.
 remarks: Similar to Oakleaf. Leaf lettuce type with long,
 narrow leaves; margins deeply lobed and scalloped light
 green color, overlaid with warm ruddy bronze sheen.
 Produces compact plants, widely adapted. Used in home
 gardens. Annual. Cultivar. Seed.
- PI 536782 origin: United States. cultivar: EIFFEL TOWER. remarks:
 Maturity 65 days. Seeds black. Tall, compact variety with
 well folded leaves; more cylindrical than the more usual
 cos shape. Annual. Cultivar. Seed.
- PI 536783 origin: United States. cultivar: GREAT LAKES OROVERDE. remarks: Maturity 90-100 days. Large, very durable crisp heading variety with wide range of planting dates. Heads well-formed, protected by many wrapper leaves. Excellent base and excellenct packer and shipper. Cold tolerance. Annual. Cultivar. Seed.
- PI 536784 origin: United States. cultivar: IMPERIAL 44. remarks: Similar to Imperial 152. Medium green color, medium size round head, semi-bald, slight savoying of frame leaves. Resistance to tipburn, and brown blight. Adapted to Southwest and East United States. Annual. Cultivar. Seed.
- PI 536785 origin: United States. cultivar: IMPERIAL 152. remarks: Similar to Imperial F and New York. Heads round, slightly flattened, partially exposed. Lighter green than other Imperial strains. Susceptible to tipburn. Resistant to brown blight. Adapted to fall planting in desert valleys of Arizona and California; spring and fall in Salinas Valley, California. Annual. Cultivar. Seed.

- PI 536786 origin: United States. cultivar: IMPERIAL 410. remarks: Similar to Imperial 625. Heads large, globular. Frame leaves medium green color, slightly savoyed. Resistant to brown blight and some races of downy mildew. Adapted to winter and spring of the Salt River Valley of Arizona. Annual. Cultivar. Seed.
- PI 536787 origin: United States. cultivar: IMPERIAL 456. remarks: Similar to Great Lakes. Heads medium to small size, globular and exposed. Frame leaves with glossy green color. Resistant to brown blight and some resistance to tipburn. Adapted to muck soils of New York and adjacent states. Annual. Cultivar. Seed.
- PI 536788 origin: United States. cultivar: IMPERIAL 615. remarks: Similar to New York but larger. Heads large, green, round. Susceptible to tipburn. Resistant to brown blight. Adapted winter culture in desert valleys of Arizona and California. Annual. Cultivar. Seed.
- PI 536789 origin: United States. cultivar: IMPERIAL D. remarks:
 Similar to but larger than Imperial F and New York
 Special. Heads dark green, medium size, good quality.
 Adapted to cool season culture in the desert valleys of Arizona and California. Fall culture in Salinas Valley,
 California. Annual. Cultivar. Seed.
- PI 536790 origin: United States. cultivar: IMPERIAL F. remarks: Similar to New York. Heads round, firm, exposed. Medium green. Resistant to brown blight. Adapted to Southwest. Annual. Cultivar. Seed.
- PI 536791 origin: United States. cultivar: REGULAR GREAT LAKES. remarks: Heads medium size, globular, exposed. Frame leaves large, thick with glossy green color. Resistant to brown blight and some resistance to tip burn. Widely adapted. Annual. Cultivar. Seed.
- PI 536792 origin: United States. cultivar: USDA GRAND RAPIDS NO 1. remarks: Loose leaf. Similar to Grand Rapids. Golden yellow, shorter, stockier and leaves more curled than Grand Rapids. Resistant to some biological races of downy mildew. Adapted to green-house culture in East and Middle-west. Annual. Cultivar. Seed.
- PI 536793 origin: United States. cultivar: UNRIVALED. remarks:
 Maturity 70 days. Seeds white. A cabbage, butterhead
 type. Leaves smooth and straight on edges. Plants and
 head entirely light green. Hearts buttery and yellow.
 Annual. Cultivar. Seed.

- PI 536794 origin: United States. cultivar: TRIANON COS. remarks:
 Maturity 66 days. Heads 8-9 inches tall, upright,
 cylindrical, medium green. Self folding leaves forms
 compact head, with greenish white interior. Leaves
 thicker more brittle; heavier midrib with sweet yet
 piquant flavor. Popular for home and market growing and
 also suitable for forcing. Annual. Cultivar. Seed.
- PI 536795 origin: United States. cultivar: SALAMANDER. remarks:
 Dependable butterhead type. Heads globular shape,
 produces fairly good when weather is so warm that most
 varieties fail. Annual. Cultivar. Seed.
- PI 536796 origin: United States. cultivar: TENNIS BALL. remarks:
 Heads firm, even in hot weather, compact, round, medium
 light green. Hearts white, sweet and very tender. Very
 reliable variety for market growers. Annual. Cultivar.
 Seed.
- PI 536797 origin: United States. cultivar: GOLDEN STATE C. remarks: Far superior to Great Lakes in edible quality. Produces better size and has greater yield at low temperatures. Plants very large, dark green, slow bolting, and crisp. Tipburn resistant. Less subject to rib-discoloration than Great Lakes. Annual. Cultivar. Seed.
- PI 536798 origin: United States. cultivar: ARIZONA SUNBRIGHT.
 remarks: Plants medium size and medium green color.
 Leaves broad, slightly savoyed and have coarse ruffle,
 but no serrrations at margins. Tips turn downward
 slightly. Head shape nearly spherical. Wrap is good.
 Uniformity and yielding ability good. Moderately
 susceptible to rib discoloration. Resistant but not
 immune to tipburn, some apparent resistance to pink rib
 and russet spotting. Annual. Cultivar. Seed.
- PI 536799 origin: United States. cultivar: SUNBLEST NO 1.
 remarks: Early maturing, fast growing. Heads large, firm
 with very good wrapper leaves. Color excellent. Butt
 large, very smooth at base. Some resistance to tipburn.
 Annual. Cultivar. Seed.
- PI 536800 origin: United States. cultivar: ANUENUE. remarks:
 Maintains advantage over Manoa variety in that it retains
 much of the butter leaf quality, is completely free of
 tipburn, fairly tolerant to diseases in the field, and
 gives a much higher yield than Manoa. Annual. Cultivar.
 Seed.

- PI 536801 origin: United States. cultivar: KULANUI. remarks: Does well at both higher and lower elevations. Produces heads averaging 1.44 pounds. Annual. Cultivar. Seed.
- PI 536802 origin: United States. cultivar: KAUWELA. remarks: Does very well at lower elevations. Averages 1.37 pounds. Annual. Cultivar. Seed.
- PI 536803 origin: United States. cultivar: LAUPILI. remarks:
 Outstanding at higher elevations. Averages 1.43 pounds.
 Resistant to tipburn. Annual. Cultivar. Seed.
- PI 536804 origin: United States. cultivar: BUTTERCRUNCH. remarks:
 Larger-growing Bibb type. Leaves thick clusters, crisp.
 Ribs tender. Plants vigorous, dark green outside,
 blanching to creamy white at center. Long-standing; can
 be grown practically all season. Seeds black. Annual.
 Cultivar. Seed.
- PI 536805 origin: United States. cultivar: MINETTO. remarks:
 Matures slightly earlier than Oswego and forms small
 compact heads with short cores. Suggested for trial on
 those mucks best suited to lettuce production where
 Oswego and Fulton usually grow too large to pack 24 to
 the carton. Annual. Cultivar. Seed.
- PI 536806 origin: United States. cultivar: OSWEGO. remarks:

 Maturity 73 days. Plants compact and low-growing. Heads firm and short cored, slow to bolt even in summer.

 Excellent results in New York muck crops. Heads somewhat smaller but still of fine quality and type for upland plant- ings. Highly recommended for home as well as commercial use. Annual. Cultivar. Seed.
- PI 536807 origin: United States. cultivar: SUMMER BIBB. remarks:
 Maturity 62 days. Can be grown all summer. Heads compact.
 Leaves a dense cluster. Hearts blanching to creamy white.
 Slow bolting. Fine eating quality. Annual. Cultivar.
 Seed.
- PI 536808 origin: United States. cultivar: GREAT LAKES 65.
 remarks: Used mostly for summer planting. Season medium.
 Head size medium/large. Head color dark. Butt core large.
 Butt appearance smooth. Solidity good. Resistance to
 tipburn fair. Annual. Cultivar. Seed.
- PI 536809 origin: United States. cultivar: GREAT LAKES 66.
 remarks: Season medium. Head size large. Head color dark.
 Butt core large. Butt appearance dark, smooth. Solidity
 good. Resistance to tipburn fair. Annual. Cultivar.
 Seed.

- PI 536810 origin: United States. cultivar: GREAT LAKES 118.
 remarks: Very early strain of Great Lakes used mainly in
 California for harvest during warmer months. Heads large,
 nicely flattened but have less leaf protection than
 regular Great Lakes. Annual. Cultivar. Seed.
- PI 536811 origin: United States. cultivar: CARAVAN. remarks:
 Developed for cool season crops. Combining core size and big vein resistance of Merit variety, with good color, attractive butt and uniformity. Well suited for late spring and early summer in coastal California and for late fall harvest in the Imperial Valley. Annual. Cultivar. Seed.
- PI 536812 origin: United States. cultivar: VANGUARD. Annual. Cultivar. Seed.
- PI 536813 origin: United States. cultivar: RIOVERDE GREAT LAKES.
 remarks: Maturity 85 days. Seeds white. Sure heading in
 cold weather. Especially adapted to Texas production.
 Slow bolting. Noted for its ability to head up well under
 cool weather growing conditions. Annual. Cultivar.
 Seed.
- PI 536814 origin: United States. cultivar: BALLOON. remarks: Many valuable traits. Maturity very early. Used over a much longer period than standard varieties. Heads soft, rather loose and deep green throughout. Very tender and sweet. Annual. Cultivar. Seed.
- PI 536815 origin: United States. cultivar: GREAT LAKES 659 G.
 remarks: Foliage deeper green than 659 with foliage of
 crinkly texture and large marketable heads. Superb
 quality, smoother base, creamy texture and better eating.
 Annual. Cultivar. Seed.
- PI 536816 origin: United States. cultivar: EARLY GREAT LAKES.
 remarks: Fine strain, earlier and more uniform than the
 original Great Lakes and more refined with less fringes
 and better quality. Size about the same as regular Great
 Lakes, but equally resistant to heat and tip-burn.
 Underside leaves are darker green. Ideal for spring,
 summer and fall. Heads solid and sweet. Annual.
 Cultivar. Seed.
- PI 536817 origin: United States. cultivar: PARIS ISLAND COS. remarks: Leaves green, slightly savoyed; the upright leaves fold nicely into well-formed heads. Annual. Cultivar. Seed.

- PI 536818 origin: United States. cultivar: GRAND RAPIDS WASHINGTON STRAIN. remarks: Maturity 45 days. Leaves loose frilled, bright green. Annual. Cultivar. Seed.
- PI 536819 origin: United States. cultivar: KENTUCKY BIBB. Annual. Cultivar. Seed.
- PI 536820 origin: United States. cultivar: PARIS WHITE COS.
 remarks: Maturity 70 days. Plants large. Leaves medium
 light green, upright, large, thick, slightly savoyed.
 Hearts almost white with very good flavor. Annual.
 Cultivar. Seed.
- PI 536821 origin: United States. cultivar: FORDHOOK. remarks:
 Maturity 78 days. Flavor and quality outstanding. Growth
 upright. Outer leaves very bright, glossy, deep green.
 Leaves loosely folded, fleshy, and heavily crinkled.
 Hearts creamy yellow. Withstands heat better than tight
 Butterhead varieties. Annual. Cultivar. Seed.
- PI 536822 origin: United States. cultivar: EARLY PRIZE HEAD.
 remarks: Maturity 45 days. Heads large, tender, loose,
 bright green. Leaves curled and crimpled, shaded brownish
 red. Flavor excellent. Annual. Cultivar. Seed.
- PI 536823 origin: United States. cultivar: GREAT LAKES GRANDEVERDE M C. remarks: Heads are slightly flattened with a thick cap leaf. Has a good green color that carries well into the butt. Selected especially for early spring cutting in the central coast counties of California. Will size well under adverse growing conditions. Annual. Cultivar. Seed.
- PI 536824 origin: United States. cultivar: CALIFORNIA CREAM
 BUTTER. remarks: Maturity 75 days. Very hardy butterhead
 variety of fine quality. Leaves broad, thick and
 crumpled; dark green spotted outside, blanched a rich
 golden yellow inside. Flavor buttery and sweet. Will
 grow at almost any season but is especially adapted for
 summer. Strictly an outdoor type. Popular with both
 market and private gardeners. Annual. Cultivar. Seed.
- PI 536825 origin: United States. cultivar: SUNBLEST NO 3. Annual. Cultivar. Seed.
- PI 536826 origin: United States. cultivar: WALDMANS DARK GRN GRAND RAPIDS. remarks: Darker green in color than regular Grand Rapids with the ability to withstand greater heat without bolting. Annual. Cultivar. Seed.

- PI 536827 origin: United States. cultivar: GRAND RAPIDS TIPBURN
 RESISTANT. remarks: Maturity 42 days. Early, hardy,
 disease resistant. Plants large, upright, compact and
 handsome, color bright green. Leaves large, broad edges,
 much waved and frilled, tender and sweet. No better
 forcing variety among the curled leaved sorts than Grand
 Rapids, and is quite good for outdoor culture as other
 sorts. Annual. Cultivar. Seed.
- PI 536828 origin: United States. cultivar: GENUINE KENTUCKY BIBB.
 remarks: Maturity 65 days. Heads small, somewhat loose in
 form with outer leaves a deep, glossy green, while the
 interior blanches to a rich yellowish green. A very
 distinct variety of lettuce possessing a crispness and
 flavor all its own. Bibb lettuce grows the same as other
 varieties except that plants are set only 6 inches apart.
 Annual. Cultivar. Seed.
- PI 536829 origin: United States. cultivar: DRUMHEAD WHITE CABBAGE. remarks: Maturity 75 days. Annual. Cultivar. Seed.
- PI 536830 origin: United States. cultivar: NO 456. remarks:

 Plants somewhat smaller and even surer heading than most strains of Great Lakes. Very slow to bolt and resistant to tipburn, but quite susceptible to frost injury. Heads medium large, solid, wrapper leaves light green, smooth, frilled. For summer harvest on muck and heavy soils in the Northeast. Annual. Cultivar. Seed.
- PI 536831 origin: United States. cultivar: BUTTER KING. remarks:
 Maturity 6-8 days later than small "Bibb" and 2-4 days
 later than White Boston. Strong vigor and generally good
 longstanding quality. Remarkably uniform. Plants have a
 12-14 inch spread. Leaves large, light green and slightly
 rugose. Good heat tolerance. Uniformly slow to bolt and
 to develop tipburn and bitterness. Eating quality
 excellent. Annual. Cultivar. Seed.
- PI 536832 origin: United States. cultivar: GREEN BAY. remarks:
 Superior Great Lakes strain. Heads trimmed, dark green,
 well formed, smooth. Leaves large, fairly erect, dark
 green, serrated margins. Cap leaves long and dark green.
 Season medium/late. Wide geographic and soil adaptability
 Maintains good rate of growth under adverse conditions.
 Good resistance to tipburn. Annual. Cultivar. Seed.
- PI 536833 origin: United States. cultivar: SIMPSONS CURLED.
 remarks: Plants develop rapidly, producing a large, dense
 growth of leaves when planted closely. Leaves broad,
 crumpled, and frilled; light yellow-green, tender, of
 excellent table quality. Seeds black. Annual. Cultivar.
 Seed.

- PI 536834 origin: United States. cultivar: BURPEE BIBB. remarks:
 Maturity 75 days. Slow-bolting; less subject to tipburn
 than most butterheads; outstanding for quality and appearance. Leaves loosely folded, blanch to a golden
 yellow on the inside, while outer leaves are dark green
 and sometimes slightly tinged brown. Recommended for
 spring or fall use. Annual. Cultivar. Seed.
- PI 536835 origin: United States. cultivar: CLIMAX 84. Annual. Cultivar. Seed.
- PI 536836 origin: United States. cultivar: VANGUARD 30. Annual. Cultivar. Seed.
- PI 536837 origin: United States. cultivar: SPARTAN LAKES.

 remarks: Maturity early. Bolting resistance. Plants dark
 green, small. Butt structure strong. Heavy mid-rib of the
 lower leaves results in stronger butt structure and less
 damage in handling and shipping. Recommended for
 commercial trial for early and mid-season production in
 muckland areas of the midwest and northeast. Annual.
 Cultivar. Seed.
- PI 536838 origin: United States. cultivar: GREAT LAKES 6238. remarks: An original strain of Great Lakes. Annual. Cultivar. Seed.
- PI 536839 origin: United States. cultivar: GREENLAND. remarks: A cross between Great Lakes and an Imperial type. Most resembles Great Lakes 118, but is consistently superior and more vigorous. Heads larger, less ribby, not as bald and have better color than 118. Annual. Cultivar. Seed.
- PI 536840 origin: United States. cultivar: CHESIBB. remarks:
 Matures 10-14 days earlier than Bibb when grown as greenhouse crop; I week earlier as an outdoor crop.
 Tolerance to low light intensity. Well adapted for muck soils. Highly productive and vigorous during short cloudy days of fall and winter. Edible quality excellent with flavor equal to Bibb. Lesser crispness makes easier handling at harvest and prevents leaves from shattering and bruising. Annual. Cultivar. Seed.

- PI 536841 origin: United States. cultivar: VALRIO. remarks: Crisp head lettuce similar to Great Lakes types, but more resistant to cold damage. Adapted to midseason planting (lower Rio Grande Valley). Horticulturally excellent, with better color, firmer heads, good frame, and better butt appearance. Consistently produces larger yields of good quality lettuce than Great Lakes varieties both in presence and absence of downy mildew, (high resistance). Annual. Cultivar. Seed.
- PI 536842 origin: United States. cultivar: MARQUETTE. remarks:
 Heads slightly smaller than Great Lakes and Fulton, but
 average about two pounds per head. Tolerant to corky root
 rot, but not completely immune to root rot and may show
 some root yellowing under severe field conditions. High
 resistance to tipburn, rib blight and bolting. Best
 adapted to North Central short season conditions, but may
 find use under winter conditions in the South. Annual.
 Cultivar. Seed.
- PI 536843 origin: United States. cultivar: ITHACA. Annual. Cultivar. Seed.
- PI 536844 origin: United States. cultivar: MINETTO 752. remarks: Maturity 80 days. Annual. Cultivar. Seed.
- PI 536845 origin: United States. cultivar: DOMINEER. remarks:
 Rapid growing variety, maturing 7 to 10 days earlier than
 the standard greenhouse variety Grand Rapids. Foliage
 slightly darker green with less frill on leaf edge than
 Grand Rapids. Ability to grow under low light intensity.
 Annual. Cultivar. Seed.
- PI 536846 origin: United States. cultivar: DARK GREEN BOSTON M T. remarks: Maturity 71 days. Very similar to White Boston, but darker green in color & better flavor. Not adapted to summer crops. Heads medium size. Outer leaves dark green, smooth, crisp and tender. Widely used for home garden and local markets for spring and fall crops. Annual. Cultivar. Seed.
- PI 536847 origin: United States. cultivar: ITHACA M T. remarks:
 Maturity 75 days. Resistant to tipburn and brown bib and
 to premature formation of seedstalks. Well suited for
 spring planting. Tough enough to take the rough handling
 of transplant lettuce. Uniform, with high luster.
 Annual. Cultivar. Seed.

- PI 536848 origin: United States. cultivar: GREEN ICE. other id:
 PVP 7100001. source: Expired (terminated). group: PVPO.
 remarks: Maturity 45 days. Crisp texture, dark glossy
 green color. Leaves blistered or savoyed with wavy,
 fringed leaf margins. Very slow to go to seed, can be
 used over a longer period of time than most leaf
 lettuces. Annual. Cultivar. Seed.
- PI 536849 origin: United States. cultivar: BARNWOOD GEM. Annual. Cultivar. Seed.
- PI 536850 origin: United States. cultivar: SOLITO. Annual. Cultivar. Seed.
- PI 536851 origin: United States. cultivar: SALINAS. Annual. Cultivar. Seed.
- PI 536852 origin: United States. cultivar: VANGUARD 75. Annual. Cultivar. Seed.
- PI 536853 origin: United States. cultivar: KORDAAT. Annual. Cultivar. Seed.
- PI 536854 origin: United States. cultivar: GREAT LAKES J STRAIN. Annual. Cultivar. Seed.
- PI 536855 origin: United States. cultivar: MONTEREY. Annual. Cultivar. Seed.
- PI 536856 origin: United States. cultivar: HOLBORN STANDARD. Annual. Cultivar. Seed.
- PI 536857 **origin:** United States. **cultivar:** ALASKA. Annual. Cultivar. Seed.
- PI 536858 origin: United States. cultivar: CORDON BLEU. Annual. Cultivar. Seed.
- PI 536859 donor id: pi 17-2. origin: United States. Annual. Cultivated. Seed.
- PI 536860 origin: United States. cultivar: ICEBERG. remarks:
 Maturity 65-70 days. Head size medium large. Head color
 light green with red tinge. Core medium large. Butt
 appearance coarse. Solidity compact. Tipburn resistance.
 Not the true "Iceberg" used as shipper in produce
 industry. Local market, home garden. Flavor excellent.
 Annual. Cultivar. Seed.

- PI 536861 origin: United States. cultivar: FULTON. remarks:
 Maturity 65-70 days. Head size medium. Head color medium
 light green. Core large. Butt appearance medium coarse.
 Solidity good. Tipburn resistance good. Developed as a
 market head lettuce for summer growth on muck soils.
 Annual. Cultivar. Seed.
- PI 536862 origin: United States. cultivar: GOLDEN STATE D. Annual. Cultivar. Seed.
- PI 536863 origin: United States. cultivar: VALVERDE. Annual. Cultivar. Seed.
- PI 536864 origin: United States. cultivar: PRIMAVERDE. remarks:
 Slower bolting than Great Lakes 659. Heads solid, nonpuffy. Uniform planting type. Holds color well into
 maturity; carries dark green color into the butt.
 Extremely good head cover that prevents frost damage in
 the fall and sun scald in late spring. Selected
 originally under eastern conditions for muck soils and
 warm growing conditions. Also good in western desert
 areas for early fall plantings. Annual. Cultivar.
 Seed.
- PI 536865. Prunus x yedoensis Matsum. ROSACEAE Japanese flowering cherry

Donated by: Adams, K., 9 Te Mara Place, New Plymouth, New Zealand. Received March 28, 1979.

origin: New Zealand. cultivar: AWAMUI. other id: Q 21672. Cultivar. Budwd.

PI 536866 to 536867. Prunus serrulata var. lannesiana (Carriere) Makino ROSACEAE

Donated by: Watanabe, K., Cotenba Noen, 59 Nagatsuka Colenbashi, Shizuokaken, Japan. Received April 17, 1979.

- PI 536866 origin: Japan. cultivar: OHTA-ZAKURA. other id: Q 21679. restricted: QUAR. Cultivar. Budwd.
- PI 536867 origin: Japan. cultivar: P.1.ARATAMA. other id: Q 21681. restricted: QUAR. Cultivar. Budwd.

- PI 536868 to 536872. Ananas ananassoides (Baker) L. B. Smith BROMELIACEAE
 - Donated by: Williams, D., Maui Pineapple Co. Ltd., Kahului, Maui, Hawaii, United States. Received July 14, 1987.
 - PI' 536868 origin: Brazil. cultivar: WILD BRAZIL. other id: HANA 38. Perennial. Wild. Cutting.
 - PI 536869 origin: Brazil. cultivar: CB 10. collected: October 12, 1938. other id: HANA 67. locality: 19km from Mogy Mirim and 35km from Campinas. Perennial. Wild. Cutting.
 - PI 536870 origin: Paraguay. cultivar: CB 15. other id: HANA 69. locality: Botanical garden at Asuncion. Perennial. Cultivated. Cutting.
 - PI 536871 origin: Paraguay. cultivar: CB 19. collected: December 08, 1938. other id: HANA 72. locality: Puerto Bertoni. Perennial. Wild. Cutting.
 - PI 536872 origin: Brazil. cultivar: CB 61. collected: February 02, 1939. other id: HANA 83. locality: Campinas Exp. Sta., Campinas. Perennial. Breeding Material. Cutting.
- PI 536873 to 536875. Ananas bracteatus (Lindley) Schultes f. BROMELIACEAE
 - Donated by: Williams, D., Maui Pineapple Co. Ltd., Kahului, Maui, Hawaii, United States. Received July 14, 1987.
 - PI 536873 origin: Brazil. cultivar: CB 5. collected: October 09, 1938. other id: HANA 64. locality: Roadside between Tatuhy and Sorocaba. remarks: Fr wt: 1928 g, brix: 14%, acid: 0.6%. Perennial. Wild. Cutting.
 - PI 536874 origin: Brazil. cultivar: CB 11. collected: October 12, 1938. other id: HANA 68. locality: Roadway at Mogy Mirim. Perennial. Wild. Cutting.
 - PI 536875 origin: Argentina. cultivar: CB 23. collected: December 14, 1938. other id: HANA 75. locality: Farm garden between San Ignacio and Puerto Nuevo, Misiones. Perennial. Cultivated. Cutting.
- PI 536876 to 536877. Ananas bracteatus (Lindley) Schultes f. var. bracteatus BROMELIACEAE
 - Donated by: Williams, D., Maui Pineapple Co. Ltd., Kahului, Maui, Hawaii, United States. Received July 14, 1989.

- PI 536876 to 536877-continued
 - PI 536876 origin: Paraguay. cultivar: CB 17. collected: December 06, 1938. other id: HANA 70. locality: Yard (semi-cultivated) near Foz do Iguassu. Perennial. Cultivated. Cutting.
 - PI 536877 origin: Paraguay. cultivar: CB 20. collected: December 09, 1938. other id: HANA 73. locality: Garden at Parana River, Puerto Bertoni. received as: A. bracteatus var. rudis. Perennial. Cultivated. Cutting.
- PI 536878. Ananas bracteatus var. tricolor (Bertoni) L. B. Smith BROMELIACEAE
 - Donated by: Williams, D., Maui Pineapple Co. Ltd., Kahului, Maui, Hawaii, United States. Received July 14, 1987.
 - origin: Paraguay. cultivar: CB 21. collected: December 09, 1938. other id: HANA 74. locality: Garden at Parana River, Puerto Bertoni. Perennial. Cultivated. Cutting.
- PI 536879 to 536979. Ananas comosus (L.) Merr. BROMELIACEAE Pineapple
 - Donated by: Williams, D., Maui Pineapple Co. Ltd., Kahului, Maui, Hawaii, United States. Received July 14, 1987.
 - PI 536879 origin: United States. origin institute: Pineapple Res. Inst. of Hawaii, Hawaii. cultivar: 41-411. other id: HANA 1. remarks: Resistant to Pink Disease. Perennial. Breeding Material. Cutting.
 - PI 536880 origin: United States. origin institute: Pineapple Res. Inst. of Hawaii, Hawaii. cultivar: 59-656. other id: HANA 2. remarks: Resistant to Heart Rot. Perennial. Breeding Material. Cutting.
 - PI 536881 origin: United States. origin institute: Pineapple Res. Inst. of Hawaii, Hawaii. cultivar: 61-2223. other id: HANA 3. Perennial. Breeding Material. Cutting.
 - PI 536882 origin: United States. origin institute: Pineapple Res. Inst. of Hawaii, Hawaii. cultivar: 58-1184. other id: HANA 4. remarks: Resistant to Pink disease. Perennial. Breeding Material. Cutting.
 - PI 536883 origin: UNKNOWN. cultivar: PERFUME. other id: HANA 5. Cultivar. Plant.
 - PI 536884 origin: Taiwan. other id: HANA 6. remarks: Fruits break apart. Perennial. Cultivated. Cutting.

- PI 536885 origin: UNCERTAIN. cultivar: CAYENNE LANAI. other id:
 HANA 8. remarks: Fr wt: 1520 to 2100 g, brix: 11 to 12%,
 acid 0.7 to 1.0%, vit C: 27 to 30 mg per 100 g.
 Perennial. Cultivar. Cutting.
- PI 536886 origin: United States. origin institute: Pineapple Res.
 Inst. of Hawaii, Hawaii. cultivar: CAYENNE M 263 NARROW
 LEAF. collected: November 07, 1955. other id: HANA 9.
 locality: PRI Waipio Sta., Block A4, Waipio, Oahu.
 remarks: 'Cayenne' mutation with narrow leaves.
 Perennial. Breeding Material. Cutting.
- PI 536887 origin: UNCERTAIN. cultivar: CAYENNE HILO. other id: HANA 10. Perennial. Cultivar. Cutting.
- PI 536888 origin: UNCERTAIN. cultivar: COLUMBIA VARIETY NO. 1. other id: HANA 11. remarks: Fr wt: 989 to 1619 g, brix: 12 to 14%. Perennial. Cultivar. Cutting.
- PI 536889 origin: UNCERTAIN. cultivar: CONGO. other id: HANA 12. remarks: Fr wt: 830 g, brix 10%, acid: 0.4%, vit C; 29 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536890 origin: American Samoa. cultivar: SPANISH SAMOA. other id: HANA 13. remarks: Fr wt: 454 to 1057 g, brix: 15 to 17%, acid: 0.9%, vit C: 24 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536891 origin: Singapore. cultivar: PERNAMBUCO. other id: HANA 14. remarks: Fr wt: 794 to 1247 g, brix: 11 to 13%, acid: 0.8%, vit C: 54 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536892 origin: Singapore. cultivar: RUBY. other id: HANA 15. remarks: Fr wt: 1361 to 1588 g, brix: 10%. Perennial. Cultivar. Cutting.
- PI 536893 origin: Barbados. cultivar: BERMUDA. other id: HANA 16. remarks: Fr wt: 1588 g, brix: 11%. Perennial. Cultivar. Cutting.
- PI 536894 origin: South Africa. cultivar: NATAL. other id: HANA 17. remarks: Fr wt: 948 g, brix: 16%. Perennial. Cultivar. Cutting.
- PI 536895 origin: UNCERTAIN. cultivar: MAURITIUS. other id: HANA 18. remarks: Fr wt: 1116 to 1415 g, brix: 9 to 12%, acid: 0.4 to 0.6%, vit C: 16 mg per 100 g. Perennial. Cultivar. Cutting.

- PI 536896 origin: UNCERTAIN. cultivar: SARAWAK. other id: HANA
 19. remarks: Ft wt: 2155 g, brix: 13%, acid: 0.7%.
 Perennial. Cultivar. Cutting.
- PI 536897 origin: Colombia. cultivar: SANTA MARTA NO. 1. other id: HANA 22. remarks: Fr wt: 1701 to 2268 g, brix: 10: 10 to 11%, acid: 0.7%, vit C: 85 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536898 origin: Philippines. cultivar: MONTSERRAT. other id: HANA 24. remarks: Fr wt: 871 to 1415 g, brix: 13 to 17%, acid: 0.4 to 1.0%. Perennial. Cultivar. Cutting.
- PI 536899 origin: Philippines. cultivar: MACGREGOR. other id:
 HANA 25. remarks: Fr wt: 862 to 1601 g, brix: 14 to 17%,
 acid 0.2 to 0.8%, vit C: 9 mg per 100 g. Perennial.
 Cultivar. Cutting.
- PI 536900 origin: Philippines. cultivar: PHILIPPINE RED. other id: HANA 26. remarks: Fr wt: 499 g, brix: 10%, acid: 0.6%, vit C: 40 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536901 origin: United States. cultivar: WILD KAILUA. other id: HANA 27. locality: Manoa Valley, Honolulu, Oahu. remarks: Fr wt: 553 to 1021 g, brix: 8 to 16%, acid: 0.6 to 0.8%, vit C: 36 to 43 mg per 100 g. Perennial. Wild. Cutting.
- PI 536902 origin: Philippines. cultivar: DACCA. other id: HANA 28. remarks: Fr wt: 1111 to 1610 g, brix: 14 to 18%, acid 0.4 to 0.8%, vit C: 39 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536903 origin: Philippines. cultivar: SUGARLOAF. other id:
 HANA 29. remarks: Fr wt: 758 to 1320 g, brix: 11 to 14%,
 acid 0.5 to 0.8%, vit C: 31 to 52 mg per 100 g.
 Perennial. Cultivar. Cutting.
- PI 536904 origin: Philippines. cultivar: SYLHET JALDUBI. other id: HANA 30. Perennial. Cultivar. Cutting.
- PI 536905 origin: Philippines. cultivar: BLACK ANTIGUA. other id: HANA 31. Perennial. Cultivar. Cutting.
- PI 536906 origin: Philippines. cultivar: CAMBRAY. other id: HANA 32. remarks: Fr wt: 1089 to 1878 g, brix: 12 to 13%, acid: 0.5 to 0.8%, vit C: 60 mg per 100 g. Perennial. Cultivar. Cutting.

- PI 536907 origin: Indonesia. developer country: Indonesia. cultivar: ANANAS KENDAL. other id: HANA 33. remarks: Fr wt: 1202 to 1433 g, brix: 7 to 10%, acid: 0.4 to 0.5%, vit C: 31 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536908 origin: Guatemala. cultivar: MONTE LIRIO. other id:
 HANA 34. remarks: Fr wt: 1542 to 1860 g, brix: 9 to 10%,
 acid: 0.4%, vit C: 37 mg per 100 g. Perennial.
 Cultivar. Cutting.
- PI 536909 origin: India. cultivar: AMALSAD. other id: HANA 35. remarks: Fr wt: 1012 g, brix: 11%, acid 0.6%, vit C: 17 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536910 origin: Panama. cultivar: COWBOY. other id: HANA 36. remarks: Fr wt: 576 to 907 g, brix: 15 to 18%, acid: 0.2 to 1.3%, vit C: 47 to 67 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536911 origin: Mexico. cultivar: CRIOLLA. other id: HANA 37. remarks: Fr wt: 1361 to 1715 g, brix: 11 to 12%, acid: 0.4 to 0.9%, vit C: 64 to 79 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536912 origin: Vietnam. cultivar: PHU QUI. other id: HANA 40. remarks: Fr wt: 839 to 1134 g, brix: 8 to 10%, acid: 0.3%, vit C: 18 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536913 origin: Vietnam. cultivar: PHO LANG TUANG. other id:
 HANA 41. remarks: Fr wt: 971 g, brix: 10%. Perennial.
 Cultivar. Cutting.
- PI 536914 origin: Vietnam. cultivar: SAIGON RED. other id: HANA 42. remarks: Fr wt: 522 to 567 g, brix: 8 to 9%, acid: 0.3 to 0.6%, vit C: 28 to 79 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536915 origin: Vietnam. cultivar: MO. other id: HANA 43.
 remarks: Fr wt: 980 to 1851 g, brix: 9 to 12%, acid: 0.4
 to 0.7%, vit C: 31 to 43 mg per 100 g. Perennial.
 Cultivar. Cutting.
- PI 536916 origin: Vietnam. cultivar: MOE. other id: HANA 44.
 remarks: Fr wt: 862 to 1012 g, brix: 7 to 12%, acid: 0.5
 to 0.6%, vit C: 29 to 55 mg per 100 g. Perennial.
 Cultivar. Cutting.
- PI 536917 origin: Vietnam. cultivar: NEP. other id: HANA 45.
 remarks: Fr wt: 671 to 1102 g, brix: 9 to 11%, acid: 0.3
 to 0.4%, vit C: 11 to 42 mg per 100 g. Perennial.
 Cultivar. Cutting.

- PI 536918 origin: Zaire. cultivar: SUGARLOAF. other id: HANA 46. remarks: Fr wt: 980 to 1066 g, brix: 9 to 10%, acid: 0.5%, vit C: 34 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536919 origin: Colombia. cultivar: CANTERRA. other id: HANA 47. remarks: Fr wt: 2132 g, brix: 10%, acid: 0.9%, vit C: 52 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536920 origin: Mexico. cultivar: MEXICAN CRIOLLA. other id:
 HANA 48. locality: Roadside, near Tamazunchale, not far
 from Puebla and Cordoba. remarks: Fr wt: 1928 to 2100 g,
 brix: 10%, acid: 0.8%, vit C: 61 mg per 100 g.
 Perennial. Wild. Cutting.
- PI 536921 origin: Colombia. cultivar: PINA CRIOLLA. collected:
 December 17, 1944. other id: HANA 49. locality: Santa
 Rosa de Cabal, Caldas. remarks: Fr wt: 1089 to 1179 g,
 brix: 12 to 13%, acid: 1.0%, vit C: 72 mg per 100 g.
 Perennial. Cultivar. Cutting.
- PI 536922 origin: Colombia. cultivar: PAPURI VAUPES COLOMBIA. other id: HANA 52. remarks: Fr wt: 1456 g, brix: 14%. Perennial. Cultivar. Cutting.
- PI 536923 origin: Western Samoa. cultivar: BRITISH SAMOA Pl. other id: HANA 53. remarks: Fr wt: 1343 g, brix: 11%. Perennial. Cultivar. Cutting.
- PI 536924 origin: Colombia. cultivar: APAPORIS. other id: HANA 55. remarks: Fr wt: 1270 g, brix: 11%. Perennial. Cultivar. Cutting.
- PI 536925 origin: Colombia. cultivar: CULTIVADE PARANA PICHUNA. other id: HANA 57. remarks: Fr wt: 771 to 1624 g, brix: 13 to 17%. Perennial. Cultivated. Cutting.
- PI 536926 origin: Guatemala. cultivar: SPANISH GUATEMALA. other id: HANA 60. remarks: Fr wt: 1270 to 1678 g. Perennial. Cultivar. Cutting.
- PI 536927 origin: Colombia. cultivar: RIO KANANARI. other id: HANA 62. locality: Rio Kananari in eastern Colombia. remarks: Fr wt: 1102 to 1533 g, brix: 13 to 15%. Perennial. Cultivated. Cutting.
- PI 536928 origin: Paraguay. cultivar: CB 18. collected: December 08, 1938. other id: HANA 71. locality: Garden near Puerto Bertoni. remarks: Fr wt: 1021 to 1529 g, brix: 10 to 11%, acid: 0.4%, vit C: 34 mg per 100 g. Perennial. Cultivated. Cutting.

- PI 536929 origin: Brazil. cultivar: CB 30. collected: January 11, 1939. other id: HANA 76. locality: Farmer's field near Corumba, Lagoa Secca. remarks: Fr wt: 1361 to 1379 g, brix: 13 to 14%, acid: 0.4 to 0.5%, vit C: 6 to 18 mg per 100 g. Perennial. Cultivated. Cutting.
- PI 536930 origin: Brazil. cultivar: CB 32. collected: January 19, 1939. other id: HANA 77. locality: Near Cuiaba at Coxipo. remarks: Fr wt: 943 g, brix: 11%, acid: 0.5%, vit C; 44mq per 100 q. Perennial. Wild. Cutting.
- PI 536931 origin: Brazil. cultivar: CB 36. collected: January 28, 1939. other id: HANA 78. locality: Backyard at Dourados. remarks: Fr wt: 907 to 1361 g, brix: 9 to 12%, acid: 0.4 to 0.9%. Perennial. Cultivated. Cutting.
- PI 536932 origin: Brazil. cultivar: RONDON. collected: February 02, 1939. other id: HANA 81. locality: Campinas Exp. Sta., Campinas. remarks: Fr wt: 1588 g, brix: 11%, acid: 0.4%, vit C: 23 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536933 origin: Brazil. cultivar: FAZENDA MOURA. collected:
 February 17, 1939. other id: HANA 85. locality: Fazenda
 (farm) Moura, Rio de Janeiro. remarks: Fr wt: 671 g,
 brix: 9%, acid: 0.5%, vit C: 30 mg per 100 g. Perennial.
 Cultivated. Cutting.
- PI 536934 origin: Brazil. cultivar: JANDAIRA. collected:
 September 18, 1939. other id: HANA 86. locality:
 Deodora Exp. Sta. remarks: Fr wt: 1021 to 1465 g, brix:
 10 to 11%, acid: 0.5 to 0.6%, vit C: 46 mg per 100 g.
 Perennial. Cultivar. Cutting.
- PI 536935 origin: Brazil. cultivar: REZENDE. collected: February 13, 1939. other id: HANA 87. locality: Fazenda (farm) Chocara Macuco near Rezende. remarks: Fr wt: 1315 to 2322 g, brix: 12 to 14%, acid: 0.5 to 0.9%, vit C: 30 to 37 mg per 100 g. Perennial. Cultivated. Cutting.
- PI 536936 origin: Brazil. cultivar: PRAZERES. collected: 1939. other id: HANA 90. locality: S of Recife at Prazeres. remarks: Fr wt: 708 to 984 g, brix: 11 to 13%, acid: 0.4 to 0.5%, vit C: 36 mg per 100 g. Perennial. Wild. Cutting.
- PI 536937 origin: Trinidad and Tobago. cultivar: TRINIDAD. collected: March 08, 1939. other id: HANA 91. locality: Roadside at Mora Forest, Trinidad. remarks: Fr wt: 1021 to 1134 g, brix: 11%, acid: 0.3 to 0.4%, vit C: 29 mg per 100 g. Perennial. Wild. Cutting.

- PI 536938 origin: UNCERTAIN. cultivar: CAYENNE 7898 4N. other id: HANA 97. remarks: Fr wt: 2059 to 2304 g, brix: 8 to 9%, acid: 0.9%, vit C: 25 mg per 100 g. Perennial. Breeding Material. Cutting.
- PI 536939 origin: United States. origin institute: Pineapple Res. Inst. of Hawaii, Hawaii. cultivar: CAYENNE M 4W. collected: June 1930. other id: HANA 101. locality: Field 27, Block 8, island of Lanai. remarks: Fr wt: 1647 to 2268 g, brix: 12 to 13%, acid: 1.2%, vit C: 20 to 37 mg per 100 g. Perennial. Breeding Material. Cutting.
- PI 536940 origin: United States. origin institute: Pineapple Res. Inst. of Hawaii, Hawaii. cultivar: CAYENNE SEEDY NO. 24. other id: HANA 108. Perennial. Breeding Material. Cutting.
- PI 536941 origin: United States. origin institute: Pineapple Res. Inst. of Hawaii, Hawaii. cultivar: CAYENNE M 267 DRY SWEET. other id: HANA 119. remarks: Fr wt: 1420 to 1474 g, brix: 17 to 19%. 'Cayenne' mutation with dry, sweet fruits. Perennial. Breeding Material. Cutting.
- PI 536942 origin: Brazil. cultivar: AMARILLO. other id: HANA 121. remarks: Fr wt: 1247 to 1996 g, brix: 13 to 15%, acid: 0.4 to 1.0%, vit C: 50 to 60 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536943 origin: Taiwan. cultivar: UHI. other id: HANA 122. remarks: Fr wt: 1352 to 1678 g, brix: 7 to 8%, acid: 0.4%, vit C: 25 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536944 origin: Panama. cultivar: RED SPANISH. other id: HANA 123. remarks: Fr wt: 1302 to 2431 g, brix: 12 to 14%, acid: 0.6 to 1.2%, vit C: 13 to 18 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536945 origin: UNCERTAIN. cultivar: TABOGA. other id: HANA 124. remarks: Fr wt: 1406 to 1610 g, brix: 12 to 13%, acid: 0.4 to 0.8%, vit C: 39 to 64 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536946 origin: Taiwan. cultivar: SMOOTH ANPI. other id: HANA 126. remarks: Fr wt: 1021 to 1814 g, brix: 6 to 11%, acid: 0.4 to 0.7%, vit C: 25 to 51 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536947 origin: Taiwan. cultivar: KOHI. other id: HANA 127. remarks: Fr wt: 85 3 to 1148 g, brix: 10%, acid: 0.5%, vit C: 24 mg per 100 q. Perennial. Cultivar. Cutting.

- PI 536948 origin: Taiwan. cultivar: SPINY ANPI. other id: HANA 128. remarks: Fr wt: 1043 to 1247 g, brix: 9 to 12%, acid: 0.5 to 0.6%, vit C: 22 to 28 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536949 origin: Philippines. cultivar: PHILIPPINE GREEN. other id: HANA 129. remarks: Fr wt: 1143 to 1270 g, brix: 10 to 11%, acid: 0.5%, vit C: 24 to 29 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536950 origin: Indonesia. cultivar: KLAJATAN. other id: HANA 130. remarks: Fr wt: 1429 to 2041 g, brix: 10 to 11%, acid 0.4%, vit C: 24 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536951 origin: Indonesia. cultivar: ANANAS MERAH. other id:
 HANA 131. remarks: Fr wt: 1134 to 1343 g, brix: 7 to
 13%, acid: 0.5 to 0.6%, vit C: 21 to 33 mg per 100 g.
 Perennial. Cultivar. Cutting.
- PI 536952 origin: Guatemala. cultivar: CHEESE PINE. other id:
 HANA 132. remarks: Fr wt: 1361 to 1719 g, brix: 13 to
 19%, acid: 0.5 to 0.7%, vit C: 28 to 35 mg per 100 g.
 Perennial. Cultivar. Cutting.
- PI 536953 origin: Philippines. cultivar: KEW. other id: HANA 133. remarks: Fr wt: 1701 to 2959 g, brix: 13 to 18%, acid: 0.5 to 1.01%, vit C: 17 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536954 origin: India. cultivar: KUMTA. other id: HANA 134.
 remarks: Fr wt: 1012 to 1225 g, brix: 7 to 11%, acid: 0.5
 to 0.9%, vit C: 38 to 77 mg per 100 g. Perennial.
 Cultivar. Cutting.
- PI 536955 origin: Venezuela. cultivar: MORADA. other id: HANA 135. remarks: Fr wt: 1243 to 1665 g, brix: ll to 13%, acid 0.5 to 0.8%, vit C: 20 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536956 origin: Venezuela. cultivar: SPANISH CRIOLLA RED. other id: HANA 136. remarks: Fr wt: 1116 to 2041 g, brix: 9 to 12%, acid: 0.7 to 0.9%, vit C: 13 to 26 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536957 origin: Venezuela. cultivar: REDONDA RED SPANISH. other id: HANA 137. remarks: Fr wt: 930 to 1814 g, brix: 10 to 13%, acid: 0.6 to 0.9%, vit C: 14 to 25 mg per 100 g. Perennial. Cultivar. Cutting.

PI 536879 to 536979-continued

- origin: Venezuela. cultivar: RED SPANISH PINA LISA.
 other id: HANA 138. remarks: Fr wt: 1388 to 1996 g,
 brix: 11 to 12%, acid: 0.6 to 0.9%, vit C: 11 to 23 mg
 per 100 g. Perennial. Cultivar. Cutting.
- PI 536959 origin: Portugal. cultivar: CAYENNE AZORES. other id: HANA 139. remarks: Fr wt: 1746 to 2481 g, brix: 12 to 14%, acid: 0.7%, vit C: 16 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536960 origin: Vistnam. cultivar: PAKSE. other id: HANA 140. remarks: Fr wt: 862 to 1270 g, brix: 10 to 11%, acid: 0.4 to 0.6%, vit C: 29 to 44 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536961 origin: Vietnam. cultivar: DO. other id: HANA 141. remarks: Fr wt: 871 g, brix: 10%, acid: 0.5%, vit C: 37 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536962 origin: Vietnam. cultivar: DEN. other id: HANA 142. remarks: Fr wt: 907 to 1043 g, brix: 9 to 10%, acid: 0.2%, vit C: 23 to 32 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536963 origin: Colombia. cultivar: PINA DE CASTILLA. collected: December 14, 1944. other id: HANA 143. locality: Santa Rosa de Cabal, Caldas. remarks: Fr wt: 1497 g, brix: 12%, acid: 1.0%, vit C: 33 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536964 origin: UNKNOWN. cultivar: MANZANA. other id: HANA 144. remarks: Fr wt: 2014 g, brix: 11%, acid: 0.4%, vit C: 39 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536965 origin: Puerto Rico. cultivar: CABEZONA. other id: HANA 145. remarks: Fr wt: 2404 to 2486 g, brix: 8 to 10%. Perennial. Cultivar. Cutting.
- PI 536966 origin: Guatemala. cultivar: ANTIGUA. collected:
 September 05, 1938. other id: HANA 146. locality:
 Native farmer's garden or orchard plot, Antigua.
 remarks: Fr wt: 2327 to 2631 g, brix: 13%, acid: 0.8%,
 Vit C: 45 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536967 origin: Brazil. cultivar: ABACAXI VERMELHO. collected:
 October 05, 1938. other id: HANA 147. locality:
 Farmer's field, 93km N of Sao Paulo, near Sao Jose dos
 Campos. remarks: Fr wt: 1361 g, brix: 12%. Perennial.
 Cultivar. Cutting.

- PI 536968 origin: Paraguay. cultivar: CB 24. collected: December 21, 1938. other id: HANA 148. locality: San Lorenzo (near Asuncion). remarks: Fr wt: 1134 to 1415 g, brix: 8 to 11%, acid: 0.3 to 0.6%, vit C: 30 mg per 100 g. Perennial. Wild. Cutting.
- PI 536969 origin: Brazil. cultivar: CB 33. collected: January 18, 1939. other id: HANA 149. locality: Bela Vista, (7km N of Cuiaba). Perennial. Wild. Cutting.
- PI 536970 origin: Brazil. cultivar: CB 38. collected: January 25, 1939. other id: HANA 150. locality: Hotel, Ponta Pora. remarks: Fr wt: 1687 to 2304 g, brix: 11 to 14%, acid: 0.4 to 0.7%, vit C: 63 mg per 100 g. Perennial. Cultivar. Cutting.
- PI 536971 origin: Brazil. cultivar: CB 46. collected: February 02, 1939. other id: HANA 151. locality: Campinas Exp. Sta., Campinas. remarks: Fr wt: 1052 to 1270 g, brix: 13 to 14%, acid: 0.8%, vit C: 18 mg per 100 g. Perennial. Breeding Material. Cutting.
- PI 536972 origin: Brazil. cultivar: REZENDE. collected: February 02, 1939. other id: HANA 152. locality: Campinas Exp. Sta., Campinas. remarks: Fr wt: 889 to 1247 g, brix: 13 to 14%, acid: 1.0 to 1.1%, vit C: 15 to 29 mg per 100 g. Perennial. Breeding Material. Cutting.
- PI 536973 origin: Brazil. cultivar: CB 65. collected: February 17, 1939. other id: HANA 153. locality: Woods at Fazenda (farm) Moura, Rio de Janeiro. remarks: Fr wt: 1134 to 1474 g, brix: 9 to 12%, acid: 0.4 to 0.5%, vit C: 35 mg per 100 g. Perennial. Wild. Cutting.
- PI 536974 origin: Brazil. cultivar: CB 67. collected: February 02, 1939. other id: HANA 154. locality: Deodora Exp. Sta. remarks: Fr wt: 1193 g, brix: 11%, acid: 0.4%, vit C: 18 mg per 100 g. Perennial. Wild. Cutting.
- PI 536975 origin: United States. origin institute: Pineapple Res. Inst. of Hawaii, Hawaii. cultivar: 58-696. other id: HANA 156. Perennial. Breeding Material. Cutting.
- PI 536976 origin: United States. origin institute: Pineapple Res. Inst. of Hawaii, Hawaii. cultivar: 63-759. other id: HANA 157. Perennial. Breeding Material. Cutting.
- PI 536977 origin: United States. origin institute: Pineapple Res. Inst. of Hawaii, Hawaii. cultivar: 57-503. other id: HANA 158. Perennial. Breeding Material. Cutting.

- PI 536879 to 536979-continued
 - PI 536978 origin: United States. origin institute: Pineapple Res. Inst. of Hawaii, Hawaii. cultivar: 53-116. other id: HANA 160. Perennial. Breeding Material. Cutting.
 - PI 536979 origin: United States. origin institute: Pineapple Res. Inst. of Hawaii, Hawaii. cultivar: 58-474. other id: HANA 161. Perennial. Breeding Material. Cutting.
- PI 536980 to 536981. Ananas fritzmuelleri Camargo BROMELIACEAE

Donated by: Williams, D., Maui Pineapple Co. Ltd., Kahului, Maui, Hawaii, United States. Received July 14, 1987.

- PI 536980 origin: Brazil. cultivar: CB 73. collected: February 25, 1939. other id: HANA 89. locality: Roadside, 0.5km N of the Exp. Sta., Itapirema, Paraiba. received as: A. bracteatus var. albus. Perennial. Wild. Cutting.
- PI 536981 Ananas bracteatus (Lindley) Schultes f. BROMELIACEAE origin: Brazil. cultivar: ALBUS. collected: February 02, 1939. other id: HANA 82. locality: Campinas Exp. Sta., Campinas. remarks: Albus means no anthocyanin. received as: A. bracteatus var. albus. Perennial. Breeding Material. Cutting.
- PI 536982 to 536983. Ananas hybrid BROMELIACEAE

Donated by: Williams, D., Maui Pineapple Co. Ltd., Kahului, Maui, Hawaii, United States. Received July 14, 1987.

- PI 536982 origin: Philippines. cultivar: PHILIPPINE HYBRID. other id: HANA 39. remarks: Fr wt: 975 to 1588 g, brix: 9 to 17%, acid: 0.5 to 0.6%, vit C: 38 mg per 100 g. Perennial. Breeding Material. Cutting.
- PI 536983 origin: Brazil. cultivar: Fl HYBRID CAMPINAS. collected: February 02, 1939. other id: HANA 79. locality: Campinas Exp. Sta., Campinas. Perennial. Breeding Material. Cutting.
- PI 536984 to 536985. Ananas lucidus Miller BROMELIACEAE

Donated by: Williams, D., Maui Pineapple Co. Ltd., Kahului, Maui, Hawaii, United States. Received July 14, 1987.

PI 536984 origin: Brazil. cultivar: CB 2. collected: September 29, 1938. other id: HANA 63. locality: Rio de Janeiro Bot. Garden, Rio de Janeiro. received as: Ananas erectifolius. Perennial. Wild. Cutting.

- PI 536984 to 536985-continued
 - PI 536985 origin: Brazil. cultivar: CB 9. collected: October 11, 1938. other id: HANA 66. locality: Fazenda (farm) in Rio de Pedras, Campinas. received as: Ananas erectifolius. Perennial. Cultivated. Cutting.
- PI 536986 to 536987. Ananas nanus (L.B.Smith) L.B.Smith BROMELIACEAE

Donated by: Williams, D., Maui Pineapple Co. Ltd., Kahului, Maui, Hawaii, United States. Received July 14, 1987.

- PI 536986 origin: Brazil. cultivar: CB 63. collected: February 02, 1939. other id: HANA 84. locality: Campinas Exp. Sta., Campinas. remarks: Dwarf plants. Perennial. Breeding Material. Cutting.
- PI 536987 origin: Brazil. cultivar: CB 71. collected: February 24, 1939. other id: HANA 88. locality: Garden of G. Paterson, Recife, Pernambuco. Perennial. Cultivated. Cutting.
- PI 536988. Arachis hypogaea L. FABACEAE Peanut

Donated by: Balick, M.J., Institute of Economic Botany, The New York Botanical Garden, Bronx, New York, United States. Received January 03, 1990.

origin: Belize. collected: November 21, 1989. locality: Local cooperative, San Antonio Village, Cayo District. remarks: Commonly cultivated type in peanut production area. Pods small, elongated, 2 to 4 seeded. Landrace. Seed.

PI 536989 to 536990. Malus domestica Borkh. ROSACEAE Apple

Donated by: Parfitt, B.D.K., National Fruit Trials, Brogdale Exp. Hort. Station, Ministry of Ag., Fisheries and Food, Faversham Kent, England, United Kingdom. Received September 27, 1983.

origin: United Kingdom. cultivar: ROSEMARY RUSSET.
other id: Q 23999. remarks: Heirloom cultivar first
described in 1831. Fruits medium 70:55mm. Shape flat,
conic, convex, slightly ribbed at eye. Skin yellow tinged
green, flushed brownish red, nearly covered with light
brown russet. Flesh firm, fine, white tinged yellowish
green. Flavor sweet, subacid, aromatic. Season late to
very late. Perennial. Cultivar. Budwd.

PI 536989 to 536990-continued

origin: United Kingdom. cultivar: ST. EDMUND'S PIPPIN.
other id: Q 24001. remarks: Heirloom cultivar recorded
in 1875. Fruits medium 54-56: 51-56mm. Shape intermediate
to flat, truncate-conic, convex not or slightly ribbed.
Skin greenish yellow almost entirely covered with russet,
slightly tinged with brownish red, fairly rough, thick
and tough. Flesh firm, fine, crisp, creamy white. Flavor
sweet subacid, aromatic. Season second-early to mid.
Perennial. Cultivar. Budwd.

PI 536991 to 536992. Triticum aestivum L. POACEAE Wheat

Donated by: Sears, R.G., Kansas Agricultural Experiment Station, Department of Agronomy, Kansas State University, Manhatten, Kansas, United States; and Agricultural Research Service-USDA. remarks: Developed by the Kansas Agricultural Experiment Station, USDA-ARS and the Wheat Genetics Resource Center and released in 1989. Received November 27, 1989.

- PI 536991 donor id: KS89WGRC8. origin: United States. cultivar:
 HAMLET. pedigree: ND7532/Chaupon/2/*4ND7532. remarks:
 Hard red germplasm with broad base of resistance to all known biotypes of Hessian fly (Mayetiola destructor).
 Resistance from the 2BS/2RL translocation. Plants tall, late maturing, similar to ND 7532 but with thicker stems.
 Winter Annual. Cultivar. Seed.
- PI 536992 donor id: KS89WGRC9. origin: United States. pedigree:
 Mutation line derived from ND 7532 using tissue culture
 program. other id: KTC86211. remarks: Germplasm
 insensitive to endogenous levels of absicic acid applied
 at either seedling or adult stages. Lower stomatal
 resistance, higher variable leaf chlorophyll
 flourescence, longer leaf area duration; greater crop
 growth rate, grain filling rate, kernel weight and grain
 yield then parent line under heat or drougth stress.
 Winter Annual. Breeding Material. Seed.

PI 536993. Triticum aestivum L. POACEAE Wheat

Donated by: Smith, E.L., Oklahoma Agricultural Exp Sta., Oklahoma State University, Stillwater, Oklahoma, United States. remarks: Developed by the Oklahoma Agricultural Experiment Station and jointly released with the Agricultural Research Service- USDA. Received December 04, 1989.

PI 536993-continued

donor id: OK84287. origin: United States. cultivar: CIMARRON. pedigree: Payne*2/CO725052. remarks: Hard red type with resistance to leaf (Puccinia recondita) and powdery mildew (Erysiphe graminis). Plants semidwarf. Maturity early to medium early. Average grain yield in Oklahoma 3314.5kg per hectare. Milling abd bread making qualities acceptable. Kernel hardness and percent grain protein good. Heterogeneous for reaction to Hessian fly. Susceptible to green bug and soil-borne mosaic virus. Winter Annual. Cultivar. Seed.

PI 536994 to 536995. Triticum aestivum L. POACEAE Wheat

Donated by: Peterson, Jr., C.J., Department of Agronomy and Soils, Washington State University, Pullman, Washington, United States. remarks: Developed by the Washington Agricultural Experiment Station. Received November 27, 1989.

- PI 536994 donor id: WA007431. origin: United States. cultivar: ELTAN. pedigree: Luke/2/BR-704443-4 (PI 167822)/Sel. 101. remarks: Soft white semidwarf germplasm with resistance to snow mold and common bunt (Tilletia foetida). Moderate resistance to yellow (stripe) rust (Puccinia striifromis). Maturity medium. Yield 4268kg per hectare. Milling and soft white flour quality good. Winter hardiness better then Daws. Winter Annual. Cultivar. Seed.
- PI 536995 donor id: WA007529. origin: United States. cultivar:

 KMOR. pedigree: Luke/VH067375/4/Aegilops
 ventricosa/Triticum persicum/ Marne*3/3/Moisson. other
 id: VH082258. remarks: Soft white semidwarf germplasm
 with high yield and resistance to Yellow (stripe) rust
 (Puccinia striiformis) and common bunt (Tilletia
 foetida). Moderately resistant to foot rot and
 Cephalisporum stripe. Maturity medium. Winter hardiness
 and quality similar to Daws. Susceptible to stem and leaf
 rusts. Winter Annual. Cultivar. Seed.
- PI 536996. Poa pratensis L. POACEAE Kentucky bluegrass

Donated by: Eslick, R.F., Montana Agricultural Experiment Station, Plant and Soil Science Department, Montana State University, Bozeman, Montana, United States. remarks: Developed by the Montana Agricultural Experiment Station and released in 1964. Received January 08, 1990.

PI 536996-continued

origin: United States. cultivar: TROY. pedigree: Selection from PI 119684 (Turkey). other id: CV-8. source: Crop Sci. 12(5):713 1972. group: CSR-BLUEGRASS. remarks: High yielding type with good performance in mixtures with birdsfoot trefoil or alfalfa. Plants highly apomictic, weakly rhizomatous. Plant height 50-80cm. Resistant to powdery mildew (Erysiphe graminis). Perennial. Cultivar. Seed.

PI 536997. Festuca hybrid POACEAE Tall fescue hybrid

Donated by: Pederson, J.F., Agricultural Research Service -- USDA, Department of Agronomy, University of Kentucky, Lexington, Kentucky, United States; and Kentucky Agricultural Research Sta.. remarks: KY-2N56 Tall Fescue Germplasm. Received September 07, 1989.

origin: United States. cultivar: KY-2N56. pedigree: Hybrid derivative Lolium multiflorum/Festuca arundinacea/2/ Festuca arundinacea/Festuca gigantea. other id: GP-1. source: Crop Sci. 30(5):1163 1990. group: CSR-FESCUE. remarks: Hybrid derivative germplasm with stable chromosome number 2n=8x=56 for use in genetic research and plant breeding. Meiotically stable. Perennial. Breeding Material. Seed.

PI 536998. Trifolium hybrid FABACEAE Red clover hybrid

Donated by: Taylor, N.L., Kentucky Agricultural Exp. Sta., University of Kentucky, Lexington, Kentucky, United States. remarks: Developed by the Kentucky Agricultural Experiment Station and released in 1988. Received January 09, 1990.

donor id: Trifolium hybrid. origin: United States.
pedigree: Trifolium pratense(R-28)/Trifolium diffusum (PI 204517). other id: GP-17. source: Crop Sci. 29(1):242 1989. group: CSR-CLOVER, RED. remarks: Highly fertile hybrid germplasm for use as a bridge in interspecific hybridization. Reproduction resembles the allogamy of T. pratense. Somatic chromosomes 30. Plant characteristics intermediate between parents. Seed yellow to brown, kidney shaped and size of tetraploid T. pratense. Annual. Breeding Material. Seed.

PI 536999. Vetiveria sp. POACEAE

Donated by: Microbiology and Plant Pathology Lab., USDA-ARS, Beltsville, Maryland, United States. remarks: Received through the 1981 India Collection of Saccharum Germplasm from North Bihar. Received December 1990.

PI 536999-continued

donor id: 9775. origin: India. origin institute: Sugarcane Breeding Institute, ICAR, Coimbatore-641 007. origin institute id: IND-81-78. remarks: Culms tending to be flat. Panicle yellowish-green. Wild. Plant.

PI 537000. Malus domestica Borkh. ROSACEAE Apple

Donated by: South African Plant Improvement Org., (SAPO), Private Bag X 5023, Stellenbosch 7600, South Africa. Received August 04, 1983.

donor id: E 12/14. origin: South Africa. origin institute: Fruit & Fruit Techno. Res. Institute, Stellenbosch. cultivar: DRAKENSTEIN. pedigree: Wemmershoek/Granny Smith//Richared. other id: E12/14. other id: Q 23866. remarks: Plants vigorous, spreading growth habit. Relatively low chilling requirement. Maturity early. Fruits medium -small, mostly solid red color when fully ripe. Flesh juicy, crisp, sweet, and aromatic, good dessert type. Average yield good. Tendency toward alternate bearing correctable by judicious pruning and fruit thinning. Pollination with Granny Smith or Starkrimson recommended. Perennial. Cultivar. Budwd.

PI 537001 to 537002. Brassica rapa L. BRASSICACEAE Turnip

Donated by: Koelz, W.N., BPIS & AE, Beltsville, Maryland, United States. Received April 04, 1960.

PI 537001 origin: India. remarks: Mixed sample with Brassica juncea, PI 179648. Cultivated. Seed.

PI 537002 origin: India. remarks: Mixed sample with Brassica juncea, PI 181042. Cultivated. Seed.

PI 537003. Brassica rapa L. BRASSICACEAE Turnip

Donated by: Seme Enterprise, Belgrade, Yugoslavia. remarks: Received through H.S. Gentry. Received October 03, 1958.

origin: Yugoslavia. remarks: Mixed sample with Brassica napus, PI 251614. Seed.

- PI 537004. Brassica juncea (L.) Czernj. & Cosson BRASSICACEAE Brown mustard
 - Donated by: Singh, H.B.; Rajan, S.S., Indian Agricultural Research Institute, New Delhi, India. remarks: Received under P.L. 480 Project A7-CR-148. Received September 1968.
 - donor id: 48072a. origin: India. remarks: Mixed sample with Brassica campestris, PI 340191. Cultivated. Seed.
- PI 537005 to 537008. Brassica juncea (L.) Czernj. & Cosson BRASSICACEAE Brown mustard
 - Donated by: Knowles, P.F., Dept. of Agronomy & Range Science, University of California, Davis, California, United States. Received April 28, 1978.
 - PI 537005 donor id: K-571a. origin: Pakistan. collected: 1976. locality: Seed store, Fatehpur. remarks: Mixed sample with Brassica campestris, PI 426243. Cultivated. Seed.
 - PI 537006 donor id: K-743a. origin: Pakistan. collected: 1976. locality: Gujrat. remarks: Mixed sample with Brassica campestris, PI 426254. Cultivated. Seed.
 - PI 537007 donor id: K-880a. origin: Pakistan. collected: 1976. locality: Rajar. remarks: Mixed sample with Brassica campestris, PI 426265. Cultivated. Seed.
 - PI 537008 donor id: K-957a. origin: Pakistan. collected: 1976. locality: Akora Khattak. remarks: Mixed sample with Brassica campestris, PI 426288. Cultivated. Seed.
- PI 537009 to 537016. Brassica rapa L. BRASSICACEAE Turnip
 - Donated by: Knowles, P.F., Dept. of Agronomy & Range Science, University of California, Davis, California, United States. Received April 20, 1978.
 - PI 537009 donor id: K-546a. origin: Pakistan. collected: 1976. locality: Dera Ghazi Khan. remarks: Mixed sample with Brassica juncea, PI 426374. Cultivated. Seed.
 - PI 537010 donor id: K-645a. origin: Pakistan. collected: 1976. locality: Jaranwala. remarks: Mixed sample with Brassica juncea, PI 426382. Cultivated. Seed.
 - PI 537011 donor id: K-673a. origin: Pakistan. collected: 1976. locality: Shargpur. remarks: Mixed sample with Brassica juncea, PI 426389. Cultivated. Seed.

- PI 537009 to 537016-continued
 - PI 537012 donor id: K-697a. origin: Pakistan. collected: 1976. locality: Shekhupura. remarks: Mixed sample with Brassica juncea, PI 426391. Cultivated. Seed.
 - PI 537013 donor id: K-829a. origin: Pakistan. collected: 1976. locality: Talagang. remarks: Mixed sample with Brassica juncea, PI 426398. Cultivated. Seed.
 - PI 537014 donor id: K-868a. origin: Pakistan. collected: 1976. locality: Peshawar. remarks: Mixed sample with Brassica juncea, PI 426400. Cultivated. Seed.
 - PI 537015 donor id: K-871a. origin: Pakistan. collected: 1976.
 locality: Charsadda. remarks: Mixed sample with Brassica
 juncea, PI 426401. Cultivated. Seed.
 - PI 537016 donor id: K-940a. origin: Pakistan. collected: 1976. locality: Mardan. remarks: Mixed sample with Brassica juncea, PI 426407. Cultivated. Seed.
- PI 537017. Brassica tournefortii Gouan BRASSICACEAE

Donated by: Knowles, P.F., Dept. of Agronomy & Range Science, University of California, Davis, California, United States. Received April 20, 1978.

donor id: K-570. origin: Pakistan. collected: 1976. locality: Seed store, Fatehpur. remarks: Mixed sample with Brassica juncea, PI 426377. Cultivated. Seed.

PI 537018. Brassica juncea (L.) Czernj. & Cosson BRASSICACEAE Brown mustard

Donated by: Knowles, P.F., Dept. of Agronomy & Range Science, University of California, Davis, California, United States. Received April 20, 1978.

donor id: K-28la. origin: Pakistan. collected: 1976. locality: Sibi. remarks: Mixed sample with Brassica nigra, PI 426410. Cultivated. Seed.

PI 537019 to 537020. Brassica rapa L. BRASSICACEAE Turnip

Donated by: Knowles, P.F., Dept. of Agronomy & Range Science, University of California, Davis, California, United States. Received April 20, 1978.

PI 537019 to 537020-continued

PI 537019 donor id: K-853a. origin: Pakistan. collected: 1976. locality: Jand. remarks: Mixed sample with Brassica tournefortii, PI 426419. Cultivated. Seed.

PI 537020 donor id: K-281b. origin: Pakistan. collected: 1976. locality: Sibi. remarks: Mixed sample with Brassica nigra, PI 426410. Cultivated. Seed.

PI 537021. Brassica juncea (L.) Czernj. & Cosson BRASSICACEAE Turnip

Donated by: Knowles, P.F., Dept. of Agronomy & Range Science, University of California, Davis, California, United States. Received June 1981.

donor id: 79-346. origin: Korea, Republic of. locality: Sei yoshu. remarks: Mixed sample with Brassica napus, PI 470026. Cultivated. Seed.

PI 537022. Eruca sativa Miller BRASSICACEAE

Donated by: Knowles, P.F., Dept. of Agronomy & Range Science, University of California, Davis, California, United States. Received April 20, 1978.

donor id: K-853b. origin: Pakistan. collected: 1976. locality: Jand. remarks: Mixed sample with Brassica tournefortii, PI 426419. Cultivated. Seed.

PI 537023. Solanum pinnatisectum Dunal SOLANACEAE

Donated by: Hjerting, J.P., Botanisk Have, Kobenhavns Universitet, Oster Farimagsgade 2B, DK-1353 Copenhagen, Denmark. Received August 23, 1989.

donor id: TRHRG 165. origin: Mexico. other id: Q 24046-Cl. locality: Border of maize fields under Acacia, road 9km from San Miguel de Allende to Celaya. remarks: Plants to 60cm tall. No flowers or fruit. Three clones A, B, and C collected. Wild. Tuber.

PI 537024. Solanum tuberosum L. SOLANACEAE

Donated by: Mace, S.A., Malachite School & Small Farm, ASR Box 21, Pass Creek Road, Gardner, Colorado, United States. Received August 23, 1989.

origin: Bolivia. cultivar: PAPA 6. other id: Q 25886. Cultivar. Tuber.

PI 537025. Solanum chacoense Bitter SOLANACEAE

Donated by: Department of Plant Breeding & Biometry, Cornell University, Ithaca, New York, United States. Received August 23, 1989.

donor id: HAO 158. origin: Bolivia. collected: April 01, 1986. collector id: HAO 158. other id: Q 26128-A,B. locality: Roadside, 12km from Abra Kasa on way to Tarabuco, 19km before Cruz Kasa, Department Chuquisaca, Azurduy Province. elevation: 2500m. Wild. Tuber.

PI 537026. Solanum gourlayi Hawkes SOLANACEAE

Donated by: Department of Plant Breeding & Biometry, Cornell University, Ithaca, New York, United States. Received August 23, 1989.

donor id: HAO 128. origin: Bolivia. collected: March 22, 1986. collector id: HAO 128. other id: Q 26120-A,B. locality: Nearby maize field, 78km from Potosi, 34km beyond Betanzos on road to Sucre, Dept. Potosi, Saavedra Province. elevation: 3280m. remarks: Leaflets small, pilose, 1st pair laterals sessile, slightly decurrent on rachis. Smaller leaflets than HAO 125 of same locality. Wild. Tuber.

PI 537027. Solanum oplocense Hawkes SOLANACEAE

Donated by: Department of Plant Breeding & Biometry, Cornell University, Ithaca, New York, United States. Received August 23, 1989.

donor id: HAO 110. origin: Bolivia. collected: March 20, 1986. collector id: HAO 110. other id: Q 26116-A. locality: Edge of cultivated field, between railroad and river, under Acacia thicket, 13km from checkpoint, 4km from junction of San Miguel-Oploca fork (left hand=Oploca fork). elevation: 3080m. remarks: Plants wilting. No flowers seen. Wild. Tuber.

PI 537028. Solanum doddsii Correll SOLANACEAE

Donated by: Department of Plant Breeding & Biometry, Cornell University, Ithaca, New York, United States. Received August 23, 1989.

PI 537028-continued

donor id: HAO 36. origin: Bolivia. collected: March 07, 1986. collector id: HAO 36. other id: Q 26110-A4. locality: Weed in maize field, 21km from Aiquile on road to Sucre, Mojon, Dept. Cochabamba, Campero Province. elevation: 2080m. remarks: No flowers seen, reported by farmers to be lilac colored. Plants common, failed to develop well, possibly due to excessive moisture. Wild. Tuber.

PI 537029 to 537035. Solanum tuberosum L. SOLANACEAE Potato

Donated by: Swiezynski, K., Institute for Potato Research, Mlochow O5-832, Rozalin, Poland. Received August 23, 1989.

- PI 537029 origin: Poland. cultivar: BRDA. other id: Q 26157-A. Cultivar. Tuber.
- PI 537030 origin: Poland. cultivar: CISA. other id: Q 26161. Cultivar. Tuber.
- PI 537031 origin: Poland. cultivar: CYNIA. other id: Q 26159. Cultivar. Tuber.
- PI 537032 origin: Poland. cultivar: FREZJA. other id: Q 27057-A. Cultivar. Tuber.
- PI 537033 origin: Poland. cultivar: PILICA. other id: Q 27052-A. Cultivar. Tuber.
- PI 537034 origin: Poland. cultivar: SAN. other id: Q 26153. Cultivar. Tuber.
- PI 537035 origin: Poland. cultivar: STOBRAWA. other id: Q 26155. Cultivar. Tuber.

PI 537036 to 537039. Solanum tuberosum L. SOLANACEAE Potato

Donated by: MacKay, G., Scottish Crop Research Institute, Pentlandfield Roslin, Midlothian, Scotland, United Kingdom. Received August 23, 1989.

- PI 537036 origin: United Kingdom. cultivar: PENTLAND IVORY. other id: Q 26325. Cultivar. Tuber.
- PI 537037 origin: United Kingdom. cultivar: G 6744-1. other id: Q 26180. Cultivar. Tuber.
- PI 537038 origin: United Kingdom. cultivar: GL77B/15. other id: Q 26171. remarks: Donated by D.R. Glendinning. Cultivar. Tuber.

- PI 537036 to 537039-continued
 - PI 537039 origin: United Kingdom. cultivar: GL77M/72. other id: Q 26320. remarks: Donated by D.R. Glendinning. Cultivar. Tuber.
- PI 537040 to 537043. Solanum tuberosum L. SOLANACEAE Potato

Donated by: Jellis, G., Plant Breeding Institute, Maris Lane, Trumpington, Cambridge, England, United Kingdom. Received August 23, 1989.

- PI 537040 origin: United Kingdom. cultivar: KINGSTON. other id: Q 26317-A. Cultivar. Tuber.
- PI 537041 origin: United Kingdom. cultivar: 79V46-14. other id: Q 27050-A. Cultivar. Tuber.
- PI 537042 origin: United Kingdom. cultivar: 80V129-1. other id: Q 26179. Cultivar. Tuber.
- PI 537043 origin: United Kingdom. cultivar: 80V89-2. other id: Q 26181-A. Cultivar. Tuber.
- PI 537044. Solanum tuberosum L. SOLANACEAE Potato

Donated by: He, C., Institute of Germplasm Resources, Chinese Acad. of Agric. Sciences, 30 Bei Shiquo Rd., Beijing, China. Received August 23, 1989.

origin: China. cultivar: NT-1. other id: Q 27054-A. Cultivar. Tuber.

PI 537045. Solanum tuberosum L. SOLANACEAE Potato

Donated by: Mix, G., Inst. fur Pflanzenbau & Pflanzenzuchtung, Bundesforschungsanstalt fur Landwirt, D-3300, Braunschweig, Germany, Federal Rep of. Received August 23, 1989.

donor id: BGRC-038-143. origin: Germany, Federal Rep of. cultivar: PENTLAND MARBLE. other id: Q 26751. Cultivar. Tissue Culture.

PI 537046 to 537048. Solanum tuberosum L. SOLANACEAE Potato

Donated by: Svalof AB International, 268, 00 Svalov, Sweden. Received August 23, 1989.

PI 537046 origin: Sweden. cultivar: ROSAMUNDA CLONE 3601. other id: Q 26942-B. Cultivar. Cutting.

PI 537046 to 537048-continued

- PI 537047 origin: Sweden. cultivar: ROSAMUNDA CLONE 3602. other id: Q 26943-A,B. Cultivar. Cutting.
- PI 537048 origin: Sweden. cultivar: ROSAMUNDA CLONE 3603. other id: Q 26944-A,B. Cultivar. Cutting.

PI 537049 to 537059. Nicotiana tabacum L. SOLANACEAE Tobacco

Donated by: Plant Genetic Resources Res. Institute, Min. of Agric., For. & Rural Affairs, P.O. Box 9 Menemen, Izmir 35661, Turkey. Received January 02, 1990.

- PI 537049 donor id: PGR-5589-89. origin: Turkey. cultivar: SAMSUN EVKAF. Cultivar. Seed.
- PI 537050 donor id: PGR-5590-89. origin: Turkey. cultivar: AGONYA. Cultivar. Seed.
- PI 537051 donor id: PGR-5591-89. origin: Turkey. cultivar: BITLIS. Cultivar. Seed.
- PI 537052 donor id: PGR-5592-89. origin: Turkey. cultivar: MUS. Cultivar. Seed.
- PI 537053 donor id: PGR-5593-89. origin: Turkey. cultivar: IZMIR (GAVURKOY). Cultivar. Seed.
- PI 537054 donor id: PGR-5594-89. origin: Turkey. cultivar: HENDEK. Cultivar. Seed.
- PI 537055 donor id: PGR-5595-89. origin: Turkey. cultivar: IZMIR (AKHISAR). Cultivar. Seed.
- PI 537056 donor id: PGR-5596-89. origin: Turkey. cultivar: BAHCE. Cultivar. Seed.
- PI 537057 donor id: PGR-5597-89. origin: Turkey. cultivar: ISKENDERUN. Cultivar. Seed.
- PI 537058 donor id: PGR-5598-89. origin: Turkey. cultivar: GUMUSHACIKOY. Cultivar. Seed.
- PI 537059 donor id: PGR-5599-89. origin: Turkey. cultivar: MALATYA. Cultivar. Seed.

PI 537060. Triticum hybrid POACEAE

Donated by: Nayeem, K.A., Marathwada Agr. Univ., Parbhani, Parbhani-431402, Maharashtra, India. remarks: Ajantha Wheat. Received January 11, 1990.

donor id: BDN 519. origin: India. origin institute: Marathwada Agr. Univ., Parbhani, Parbhani-431402, Maharashtra. cultivar: AJANTHA. pedigree: Yaqui 53(T. aestivium)/PW-5(T. durum). other id: CV-763. group: CSR-WHEAT. remarks: Maturity early, 85-90 days. Plants 140-150cm tall. Kernels amber colored, hard. Protein content 15%. Susceptible to black and brown rusts, earliness minimizes severity of infection. Adapted to dry/rainfed areas. Lodges under heavy irrigation and fertilization. Cultivar. Seed.

PI 537061. Vetiveria zizanioides (L.) Nash POACEAE Vetiver

Donated by: Greenfield, J., World Bank, New Delhi, India. remarks: Received through M.E. Carter, USDA-ARS, Washington, D.C. Received December 19, 1987.

origin: India. other id: BE-1605. other id: Q 27763. locality: Stop-bank of weir (small dam), banks of Yamuma River, just N of Delhi. Wild. Plant.

PI 537062 to 537063. Abelmoschus esculentus (L.) Moench MALVACEAE Okra

Donated by: IBPGR, Rome, Italy; and Ingram, G.B., Environmental Planning Program, 202 Wurster Hall, University of California-Berkeley, Berkeley, California, United States. remarks: Received through IBPGR, Rome, Italy. 1986 IBPGR mission to southern Aur Mountains, north central Niger. Received December 15, 1988.

PI 537062 donor id: C007. origin: Niger. local name: Kubewa (Tamacheq language). collected: November 14, 1986. collector id: C007. locality: Semi-desert grassland, sand and gravel with little humus, brown-light brown soil, large garden area adjacent to Akrereb extending 1 km along wadi of tabelot Valley, Akrereb, Agades Department. latitude: 17 deg. 36 min. N. longitude: 8 deg. 57 min. E. elevation: 848m. remarks: Plants up to 1 m tall, vigorous. Seed heads up to 80mm long and 35mm wide. Soil pH 6.5. Associaed species: Ricinus communis, Phoenix dactylifora, Parkinsonia sp., pomegranite, Salvadora persica, Ficus sp. Fruits prepared in a green sauce. Part of fruit used to wash hair. Landrace. Seed.

PI 537062 to 537063-continued

PI 537063 donor id: C022. origin: Niger. local name: Kewa (Tamacheq language). collected: November 20, 1986. collector id: C022. locality: Semi-desert grassland, sand clay with areas of gravel, brown-light brown soil, gardens at beginning of Aouderas Wadi, on southern bank of wadi next to village, Aouderas, Agades Department. latitude: 7 deg. 37 min. N. longitude: 8 deg. 23 min. E. elevation: 803m. remarks: Stems weeping up to 2m long, highly vigorous. Fruits 10cm long and 5cm wide. Soil pH 7.5. Used as sauce with grains and as shampoo. Landrace. Seed.

PI 537064. Cynodon dactylon (L.) Pers. POACEAE Bermudagrass

Donated by: IBPGR, Rome, Italy; and Ingram, G.B., Environmental Planning Program, 202 Wurster Hall, University of California-Berkeley, Berkeley, California, United States. remarks: Received through IBPGR, Rome, Italy. 1986 IBPGR mission to southern Aur Mountains, north central Niger. Received December 15, 1988.

donor id: C041. origin: Niger. local name: Alessembe (Tamacheq language). collected: November 16, 1986. collector id: C041. locality: Semi-desert grassland, sandy with clay and humus, dark brown soil, lowest series of irrigated gardens on main route to Bagzane escarpment, Ighalebelabene, Tabelot Valley, Agades Department. latitude: 17 deg. 40 min. N. longitude: 8 deg. 48 min. E. elevation: 1280m. remarks: Soil pH 7.0. Associated species: Acacia spp., Balanites sp. in thorn hedges, Salvadora persica, date palm. Used as forage. Wild. Seed.

PI 537065 to 537073. Pennisetum glaucum (L.) R. Br. POACEAE Pearl millet

Donated by: IBPGR, Rome, Italy; and Ingram, G.B., Environmental Planning Program, 202 Wurster Hall, University of California-Berkeley, Berkeley, California, United States. remarks: Received through IBPGR, Rome, Italy. 1986 IBPGR mission to southern Aur Mountains, north central Niger. Received December 15, 1988.

- PI 537065 donor id: C003. origin: Niger. local name: Bouchoucheni (Tamacheq language). collected: November 14, 1986. collector id: C003. locality: Semi-desert grassland, sand and gravel with little humus, brown light brown soil, large garden area adjacent to Akrereb extending 1 km along the wadi of Tabelot Valley, Akrereb, Agades Department. latitude: 17 deg. 36 min. N. longitude: 8 deg. 57 min. E. elevation: 848m. remarks: Stems up to 200cm tall. Inflorescences to 10cm. Soil pH 6.5. Grain ground and mixed with water and tomato. Landrace. Seed.
- PI 537066 donor id: C018. origin: Niger. local name: Ennele
 (Tamacheq language). collected: November 20, 1986.
 collector id: C018. locality: Semi-desert grassland,
 sandy clay with gravel, brown light brown soil, gardens
 of Abardokh in wadi of Atkaki, 8km from Abardokh,
 Abardokh, Agades Department. latitude: 7 deg. 20 min.
 N. longitude: 8 deg. 42 min. E. elevation: 88lm.
 remarks: Plants up to 3m tall, highly vigorous. Seed
 heads up to 14cm and 3cm broad, seed exerted. Soil pH 7.
 Used as cereal. Landrace. Seed.
- PI 537067 donor id: C034. origin: Niger. local name: Bouchoucheni (Tamacheq language). collected: November 24, 1986. collector id: C034. locality: Semi-desert grassland, sand, gravels with some clay, brown soil, wadi at SE base of plateau Adrar Agalah, gardens of Timta, Timta, Agades Department. latitude: 18 deg. 7 min. N. longitude: 8 deg. 47 min. E. elevation: 1000m. remarks: Plants up to 2.5m tall, vigorous. Seed heads up to 10cm long and 3cm broad, some with long hairs protruding from heads. Soil pH 6.5-7.0. Associated species: Eragrostis sp., Dactylotenium sp., Cynodon dactylon and garden species. Grain ground and mixed with water as a gruel. Landrace. Seed.
- PI 537068 donor id: C037. origin: Niger. local name: Baoudarache (Tamacheq language). collected: November 25, 1986. collector id: C037. locality: Semi-desert grassland, sand, gravel, and clay, brown soil, gardens in Afassas wadi on western side of Bagzane Massif, 47km N of Akarereb following track along base of escarpment, Akerereb, Agades Department. latitude: 17 deg. 46 min. N. longitude: 8 deg. 57 min. E. elevation: 900m. remarks: Plants up to 2.5m tall, highly vigorous. Seed heads 15cm long and 3.5cm broad, very tightly packed with grain. Soil pH 6.5-7.0. Repotedly originaed in Adderas at least 45 years ago. Used as cereal. Wild. Seed.

- Onor id: C038. origin: Niger. local name: Baoudarache (Tamacheq language). collected: November 25, 1986. collector id: C038. locality: Semi-desert grassland, sand, gravel, and clay, brown soil, gardens in Afassas wadi on western side of Bagzane Massif, 47km N of Akarereb following track along base of escarpment, Akerereb, Agades Department. latitude: 17 deg. 46 min. N. longitude: 8 deg. 57 min. E. elevation: 900m. remarks: Plants up to 2.5m tall, highly vigorous. Seed heads 22.5cm long and 4.5cm broad, loosely packed wth grain. Soil pH 6.5-7.0. Reportedly originated from the Bagzane escarpment about 50 years ago. Wild. Seed.
- PI 537070 donor id: C042. origin: Niger. collected: November 16, 1986. collector id: C042. locality: Semi-desert grassland, sandy, with clay and humus, dark brown soil, lowest of series of irrigated gardens, on main route to Bagzane escarpment, Ighalebelabene, Tabelot Valley, Agades Departmen. latitude: 17 deg. 40 min. N. longitude: 8 deg. 48 min. E. elevation: 1280m. remarks: Plants up to 200cm tall. Heads 23cm x 4cm, light blue-green. Soil pH 7.0. Preferred millet for cuisine because seeds easier to mill. Landrace. Seed.
- PI 537071 donor id: C046. origin: Niger. local name: Bouchoucheni (Tamacheq language). collected: November 16, 1986. collector id: C046. locality: Semi-desert grassland, sand, some gravel, light brown soil, Okadeti village, top of major camel trail from Tabelot, Okadeti on Bagzane Escarpment, Agades Department. latitude: 17 deg. 41 min. N. longitude: 8 deg. 45 min. E. elevation: 1500m. remarks: Soil pH 7.0-7.5. Associated species: Acacia raddiana, Acacia seyel, Salvadora persica and irrigated garden species. Grain ground and mixed with water and tomato. Landrace. Seed.
- PI 537072 donor id: C053. origin: Niger. local name: Inala telawa (Tamacheq language). collected: November 17, 1986. collector id: C053. locality: Semi-desert grassland, on floodplain above village of Merig on Bagzane Plateau, Agades, Agades Department. latitude: 17 deg. 41 min. N. longitude: 8 deg. 43 min. E. elevation: 1660m. remarks: Plants up to 2m tall, highly vigorous. Heads short, 15cm x 3.5cm. Used as cereal prepared as porridge. Landrace. Seed.

PI 537073 donor id: C054(b). origin: Niger. local name: Inala nabarah (Tamacheq language). collected: November 17, 1986. collector id: C054(b). locality: Semi-desert grassland, on floodplain above village of Merig on Bagzane Plateau, Agades, Agades Department. latitude: 17 deg. 41 min. N. longitude: 8 deg. 43 min. E. elevation: 1660m. remarks: Plants up to 2m tall, highly vigorous. Heads large, up to 22cm long. Associated species: cultivated sorghum, Acacia raddiana. Used as cereal prepared as porridge. Landrace. Seed.

PI 537074 to 537075. Pennisetum sieberianum (Schldl.) Stapf & C. E. Hubb. POACEAE

Donated by: IBPGR, Rome, Italy; and Ingram, G.B., Environmental Planning Program, 202 Wurster Hall, University of California-Berkeley, Berkeley, California, United States. remarks: Received through IBPGR, Rome, Italy. 1986 IBPGR mission to southern Aur Mountains, north central Niger. Received December 15, 1988.

- donor id: C019. origin: Niger. local name: Chibra PI 537074 (Tamacheq and Arabic languages). collected: November 20, collector id: C019. locality: Semi-desert grassland, sandy clay with gravel, brown light brown soil, gardens of Abardokh in wadi of Atkaki, 8km from Abardokh, Abardokh, Agades Department. latitude: 7 deq. 8 deg. 42 min. E. elevation: longitude: 20 min. N. 881m. remarks: Plants up to 2.5m tall, highly vigorous, weedy. Heads up to 9cm long and 1.5cm broad, white and violet, seed shatters easily, very branched. Soil pH 7. Used as forage for domestic animals. received as: P. americanum subsp. stenostachyum. Wild. Seed.
- PI 537075 donor id: C047. origin: Niger. local name: Chibra (Tamacheq and Arabic languages). collected: November 16, 1986. collector id: C047. locality: Semi-desert grassland, sand, some gravel, light brown soil, Okadeti village, top of major camel trail from Tabelot, Okadeti on Bagzane Escarpment, Agades Department. latitude: 17 deg. 41 min. N. longitude: 8 deg. 45 min. E. elevation: 1500m. remarks: Plants <2m tall, weedy. Heads highly variable, unexerted and semi-exerted seeds, blonde, red or green. Soil pH 7.0-7.5. Associated species: Acacia raddiana, Acacia seyel, Salvadora persica and irrigated garden species. Used as forage for domestic animals. received as: P. americanum subsp. stenostachyum. Wild. Seed.

PI 537076 to 537077. Pennisetum violaceum (Lam.) Rich. POACEAE

Donated by: IBPGR, Rome, Italy; and Ingram, G.B., Environmental Planning Program, 202 Wurster Hall, University of California-Berkeley, Berkeley, California, United States. remarks: Received through IBPGR, Rome, Italy. 1986 IBPGR mission to southern Aur Mountains, north central Niger. Received December 15, 1988.

- PI 537076 donor id: C190. origin: Niger. local name: Ebenaou (Tamacheq language). collected: November 15, 1986. collector id: C190. locality: Semi-desert grassland, clay and sand, red soil, 25km of N'calane, Fagoshia, Agades Department. latitude: 17 deg. 15 min. N. longitude: 7 deg. 2 min. E. elevation: 390m. remarks: Plants 1.5m tall, vigorous. Heads up to 14cm long, white. Seed shatters easily. Soil pH 7.5. Associated species: Acacia erhenbergiana, Calatropis procera, Sorghum ethiopicum. Used in house construction. Wild. Seed.
- PI 537077 donor id: C192. origin: Niger. local name: Ebenaou (Tamacheq languages). collected: November 18, 1986. collector id: C192. locality: Semi-desert grassland, clay and sand, white soil, near Tagota on trail to Arlit, Kakan, Agades Department. latitude: 17 deg. 53 min. N. longitude: 7 deg. 51 min. E. elevation: 491m. remarks: Plants 1.6-2.5m tall, vigorous. Heads up to 15cm long, white. Seed shatters easily. Soil pH 6.5-7.0. Associated species: Calatropis sp., Acacia spp., Sorghum ethiopicum, Brachiaria sp., Setaria verticillata, Cassia sp. Used as forage for donkeys. Wild. Seed.

PI 537078 to 537085. Sorghum bicolor (L.) Moench POACEAE Sorghum

Donated by: IBPGR, Rome, Italy; and Ingram, G.B., Environmental Planning Program, 202 Wurster Hall, University of California-Berkeley, Berkeley, California, United States. remarks: Received through IBPGR, Rome, Italy. 1986 IBPGR mission to southern Aur Mountains, north central Niger. Received December 15, 1988.

PI 537078 donor id: C007b. origin: Niger. local name: Abora (Tamacheq language). collected: November 14, 1986. collector id: C007b. locality: Semi-desert grassland, sand and gravel with little humus, light brown-brown soil, large garden area adjacent to Akrereb extending 1 km along the wadi of Tabelot Valley, Akrereb, Agades Department. latitude: 17 deg. 36 min. N. longitude: 8 deg. 57 min. E. elevation: 848m. remarks: Plants 1.6 to 2m tall, vigorous, some retarded by virus. Heads densely packed with exerted white seeds. Soil pH 6.5. Associated species: Ricinus communis, Phoenix dactylifora. Grain eaten as a staple. Landrace. Seed.

- PI 537079 donor id: C020. origin: Niger. local name: Farfara (Tamacheq language). collected: November 20, 1986. collector id: C020. locality: Semi-desert grassland, sandy clay with gravel, light brown- brown soil, gardens of Abardokh in wadi of Atkaki, 8km from Abardokh, Agades Department. latitude: 7 deg. 20 min. N. longitude: 8 deg. 42 min. E. elevation: 88lm. remarks: Plants up to 3m tall, highly vigorous. Heads up to 25cm long and 5cm broad, grain exerted, white with black glumes, dense and closely packed to stem. Leaves up to 5cm broad. Soil pH 7. Used as cereal as well as forage for domestic animals. Landrace. Seed.
- PI 537080 donor id: C021. origin: Niger. local name: Terame (Tamacheq language). collected: November 20, 1986. collector id: C021. locality: Semi-desert grassland, sandy clay with gravel, brown light brown soil, gardens of Abardokh in wadi of Atkaki, 8km from Abardokh, Agades Department. latitude: 7 deg. 20 min. N. longitude: 8 deg. 42 min. E. elevation: 88lm. remarks: Plants 2.5m tall, vigorous. Heads up to 20cm long and 5cm broad, very dense and close to stem. Glumes yellow. Seed exerted, very red, used as skin colourant. Soil pH 7.0. Landrace. Seed.
- PI 537081 donor id: C043. origin: Niger. local name: Farfara (Tamacheq language). collected: November 16, 1986. collector id: C043. locality: Semi-desert grassland, sandy with clay and humus, dark brown soil, lowest series of irrigated gardens on main route to Bagzane escarpment, Ighalebelabene, Tabelot Valley, Agades Department. latitude: 17 deg. 40 min. N. longitude: 8 deg. 48 min. E. elevation: 1280m. remarks: Plants <3m tall. Heads up to 28cm x 6cm broad, white. Soil pH 7.0. Associated species: Acacia spp., Balanites sp. in thorn hedges, Salvadora persica, date palm. Eaten as food like pearl millet porridge. Landrace. Seed.
- PI 537082 donor id: C048. origin: Niger. local name: Cibora mulan (Tamacheq language). collected: November 16, 1986. collector id: C048. locality: Semi-desert grassland, sand some gravel, light brown soil, Okadeti village, top of major camel trail from Tabelot, on Bagzane Escarpment, Agades Department. latitude: 17 deg. 41 min. N. longitude: 8 deg. 45 min. E. elevation: 1500m. remarks: Plants vigorous. Heads small, white. Soil pH 7.0-7.5. Associated species: Acacia raddiana, Acacia seyel, Salvadora persica and irrigated garden species. Used as cereal mainly in porridge. Landrace. Seed.

- PI 537083 donor id: C049. origin: Niger. local name: Sada keye (Tamacheq language). collected: November 16, 1986. collector id: C049. locality: Semi-desert grassland, sand some gravel, light brown soil, Okadeti village, top of major camel trail from Tabelot, on Bagzane Escarpment, Agades Department. latitude: 17 deg. 41 min. N. longitude: 8 deg. 45 min. E. elevation: 1500m. remarks: Plants vigorous. Heads red. Soil pH 7.0-7.5. Associated species: Acacia raddiana, Acacia seyel, Salvadora persica and irrigated garden species. Used as cereal mainly in porridge. Landrace. Seed.
- PI 537084 donor id: C050. origin: Niger. local name: Farfara (Tamacheq language). collected: November 16, 1986. collector id: C050. locality: Semi-desert grassland, sand some gravel, light brown soil, Okadeti village, top of major camel trail from Tabelot, on Bagzane Escarpment, Agades Department. latitude: 17 deg. 41 min. N. longitude: 8 deg. 45 min. E. elevation: 1500m. remarks: Plants highly vigorous. Heads large, white. Associated species: Acacia raddiana, Acacia seyel, Salvadora persica and irrigated garden species. Used as cereal mainly in porridge. Landrace. Seed.
- PI 537085 donor id: Cll8. origin: Niger. collector id: Cll8. Seed.

PI 537086. Sorghum hybrid POACEAE

Donated by: IBPGR, Rome, Italy; and Ingram, G.B., Environmental Planning Program, 202 Wurster Hall, University of California-Berkeley, Berkeley, California, United States. remarks: Received through IBPGR, Rome, Italy. 1986 IBPGR mission to southern Aur Mountains, north central Niger. Received December 15, 1988.

donor id: C059. origin: Niger. pedigree: S. bicolor/S. arundininaceum. local name: Farfara (Tamacheq language). collected: November 18, 1986. collector id: C059. locality: Semi-desert grassland, sandy loam, light brown soil, N of major gardens and core settlement in center of Bagzane-n-Ammas along wash to Ooauouari village, Agades Department. latitude: 17 deg. 43 min. N. longitude: 8 deg. 44 min. E. elevation: 1600m. remarks: Plants approx. 1 m tall, weedy. Heads highly variable. Soil pH 6.5-7.0. Associated species: cultivated wheat, barley, millet, sorghum plus Acacia spp. Used as incidental forage. received as: Sorghum bicolor x S. arundininace. Wild. Seed.

PI 537087 to 537089. Vigna unguiculata (L.) Walp. subsp. unguiculata FABACEAE Cowpea

Donated by: IBPGR, Rome, Italy; and Ingram, G.B., Environmental Planning Program, 202 Wurster Hall, University of California-Berkeley, Berkeley, California, United States. remarks: Received through IBPGR, Rome, Italy. 1986 IBPGR mission to southern Aur Mountains, north central Niger. Received December 15, 1988.

PI 537087 donor id: C044. origin: Niger. local name: Tanzan (tamacheq language). collected: November 16, 1986. collector id: C044. locality: Semi-desert grassland, sandy with clay and humus, dark brown soil, lowest of series of irrigated gardens on main route to Bagzane escarpment, Ighalebelabene, Tabelot Valley, Agades Department. latitude: 17 deg. 40 min. N. longitude: 8 deg. 48 min. E. elevation: 1280m. remarks: Soil pH 7.0. Associated species: Acacia spp., Balanites sp. in thorn hedges, Salvadora persica, date palm. Used as vegetable. Landrace. Seed.

PI 537088 donor id: Clll. origin: Niger. local name: Tenant (Tamacheq language). collected: December 02, 1986. collector id: Clll. locality: Semi-desert grassland, sandy gravel, light brown soil, at beginning of pass on trail to Bagzane escarpment, 14km N, NW of Akorereb, Akerereb, Tabelor, Agades Department. latitude: 17 deg. 41 min. N. longitude: 8 deg. 50 min. E. elevation: 960m. remarks: Creeping annual. Flowers yellow. Pods up to 9cm long x 7cm broad. Stems reddish green. Soil pH 7.5. Associated species: Acacia ehrenbergiana, Salvador persica, Balanites aegypiaca, Aristida sp., potatoes, onions, garlic, millet, wheat, tomatoes. Seed eaten with millet. Annual. Wild. Seed.

PI 537089 donor id: Cl19. origin: Niger. collector id: Cl19. Seed.

PI 537090. Brassica napus L. BRASSICACEAE Rape

Donated by: Seoul Seed Co., 182-14 Chongro-5 ka, Chongro-ku, Seoul, Korea. Received June 28, 1989.

origin: Korea, Republic of. cultivar: SEOUL. remarks: Oil content 43%, quality excellent. Protein content 24%. Erucic acid content of oil and glucosinolate content of seed meal very low. Used for animal and domestic fowl feed. Annual. Cultivar. Seed.

PI 537091. Chrysanthemum coronarium L. ASTERACEAE Garland chrysanthemum

Donated by: Seoul Seed Co., 182-14 Chongro-5 ka, Chongro-ku, Seoul, Korea. Received June 28, 1989.

origin: Korea, Republic of. cultivar: GREEN LADY.
remarks: Plants upright. Leaves dark green and tender
with a strong favorable aroma. Cold tolerant. Easy to
grow all year round including indoor cultivation during
winter and open-field growing. Annual. Cultivar. Seed.

PI 537092. Cucumis melo L. CUCURBITACEAE

Donated by: Seoul Seed Co., 182-14 Chongro-5 ka, Chongro-ku, Seoul, Korea. Received June 28, 1989.

origin: Korea, Republic of. cultivar: EUNCHUN. remarks: Fruits 400 grams, oval shaped. Flesh white, very sweet, crispy and tasteful. Suitable for summer cultivation in the field. Annual. Cultivar. Seed.

PI 537093. Daucus carota L. APIACEAE Carrot

Donated by: Seoul Seed Co., 182-14 Chongro-5 ka, Chongro-ku, Seoul, Korea. Received June 28, 1989.

origin: Korea, Republic of. cultivar: NEW KUROTA. remarks: Roots 15-17 cm long 90 days after sowing, 140-190 grams, bright orange. Heat tolerant. Disease resistant. Suitable for summer cultivation. Biennial. Cultivar. Seed.

PI 537094. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Fehr, W.R ., Iowa Agr. and Home Economics Exp. Sta., Dept. of Agronomy, Iowa State Univ., Ames, Iowa, United States; and Puerto Rico Agr. Exp. Sta.. remarks: Kenwood Soybean. Received January 17, 1990.

PI 537094-continued

donor id: A85-291001. origin: United States. origin institute: Iowa Agr. and Home Econ. Exp. Sta., Ames, Iowa 50010. cultivar: Kenwood. pedigree: Elgin x Asgrow 'A1937'. other id: CV-253. source: Crop Sci. 30(5):1162 1990. group: CSR-SOYBEAN. other id: PVP 9000039. source: Pending. group: PVPO. remarks: Maturity Group II with yield superiority to cultivars of similar maturity. Best adapted to approx. 41 to 43 deg. Lat. Flowers purple. Pubescense tawny. Pods brown at maturity. Seeds dull yellow with black hila. Hypocotyl elongation at 25 deg. C excellent. Moderately susceptible to purple stain (Cercospora kikuchii). Susceptible to Phytophthora rot, brown stem rot, bacterial tan spot, and soybean mosaic virus. Annual. Cultivar. Seed.

PI 537095. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Fehr, W.R., Iowa Agr. and Home Economics Exp. Sta., Dept. of Agronomy, Iowa State Univ., Ames, Iowa, United States; and Puerto Rico Agr. Exp. Sta.. remarks: Marcus Soybean. Received January 17, 1990.

donor id: A85-193023. origin: United States. origin institute: Iowa Agr. and Home Econ. Exp. Sta., Ames, Iowa 50010. cultivar: Marcus. pedigree: A79-135010 x Asgrow 'A1937' A79-135010 is from Pride B216 x Cumberland. other id: CV-254. source: Crop Sci. 30(5):1162 1990. group: CSR-SOYBEAN. other id: PVP 9000040. source: Pending. group: PVPO. remarks: Maturity Group II with yield superiority to cultivars of similar maturity. Best adapted to approx. 42 to 44 deg. Lat. Flowers white. Pubescence tawny. Pods tan at maturity. Seeds dull yellow with brown hila. Susceptible to Phytophthora rot, pod and stem blight, and soybean mosaic virus. Mod. susceptible to purple stain, brown stem rot, and bacterial tan spot. Annual. Cultivar. Seed.

PI 537096. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Orf, J.H., Minnesota Agr. Exp. Sta., Dept. of Agronomy & Plant Genetics, Univ. of Minnesota, St. Paul, Minnesota, United States. remarks: Minnatto Soybean. Received January 11, 1990.

PI 537096-continued

origin: United States. origin institute: Minnesota Agr. Exp. Sta., St. Paul, Minnesota 55108. cultivar: Minnatto. pedigree: Evans x PI 437267. other id: PVP 9000046. source: Pending. group: PVPO. other id: CV-268. source: Crop Sci. 31(1):233 1991. group: CSR-SOYBEAN. remarks: Maturity Group O. Indeterminate growth type. Flowers white. Pubescence gray. Pods brown. Seeds dull yellow with yellow hila. Height 70cm. Seed weight 100mg. Protein content 42.5%. Oil content 17.4%. Resistant to phytophthora root rot (caused by Phytophthora megasperma). Spring Annual. Cultivar. Seed.

PI 537097. Zea mays L. subsp. mays POACEAE Corn

Donated by: Holden's Foundation Seeds, Inc., United States. Received January 11, 1990.

origin: United States. cultivar: LH 195. other id: PVP 9000047. source: Pending. group: PVPO. Cultivar. Seed.

PI 537098. Zea mays L. subsp. mays POACEAE Corn

Donated by: Holden's Foundation Seeds, Inc., United States. Received January 11, 1990.

origin: United States. cultivar: LH 204. other id: PVP 9000048. source: Pending. group: PVPO. Cultivar. Seed.

PI 537099. Zea mays L. subsp. mays POACEAE Corn

Donated by: Holden's Foundation Seeds, Inc., United States. Received January 11, 1990.

origin: United States. cultivar: LH 205. other id: PVP 9000049. source: Pending. group: PVPO. Cultivar. Seed.

PI 537100. Zea mays L. subsp. mays POACEAE Corn

Donated by: Holden's Foundation Seeds, Inc., United States. Received January 11, 1990.

origin: United States. cultivar: LH 210. other id: PVP
9000050. source: Pending. group: PVPO. Cultivar.
Seed.

PI 537101. Zea mays L. subsp. mays POACEAE Corn

Donated by: Holden's Foundation Seeds, Inc., United States. Received January 11, 1990.

origin: United States. cultivar: LH 211. other id: PVP 9000051. source: Pending. group: PVPO. Cultivar. Seed.

PI 537102. Festuca rubra L. POACEAE Spreading red fescue

Donated by: Pickseed West Inc., United States. Received January 11, 1990.

origin: United States. cultivar: JASPER. other id: PVP 9000052. source: Pending. group: PVPO. Cultivar. Seed.

PI 537103. Festuca ovina L. POACEAE Sheep fescue

Donated by: Jacklin Seed Co., United States. Received January 11, 1990.

origin: United States. cultivar: <MX-86>. other id: PVP 9000053. source: Pending. group: PVPO. Cultivar. Seed.

PI 537104. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: Pickseed West Inc., United States. Received January 11, 1990.

origin: United States. cultivar: GUARDIAN. other id: PVP 9000054. source: Pending. group: PVPO. Cultivar. Seed.

PI 537105. Lactuca sativa L. ASTERACEAE Lettuce

Donated by: Harris Moran Seed Co., United States. Received January 11, 1990.

origin: United States. cultivar: ALPHA DMR. other id: PVP 9000055. source: Pending. group: PVPO. Cultivar. Seed.

PI 537106. Phaseolus vulgaris L. FABACEAE Garden bean

Donated by: Harris Moran Seed Co., United States. Received January 11, 1990.

PI 537106-continued

origin: United States. cultivar: ESPADA. other id: PVP 9000056. source: Pending. group: PVPO. Cultivar. Seed.

PI 537107. Phaseolus vulgaris L. FABACEAE Garden Bean

Donated by: Ferry-Morse Seed Co., United States. Received January 11, 1990.

origin: United States. cultivar: SATIN. other id: PVP
9000057. source: Pending. group: PVPO. Cultivar.
Seed.

PI 537108. Phaseolus lunatus L. FABACEAE Lima bean

Donated by: Ferry-Morse Seed Co., United States. Received January 11, 1990.

origin: United States. cultivar: PACKERS. other id: PVP
9000058. source: Pending. group: PVPO. Cultivar.
Seed.

PI 537109. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: Pickseed West Inc., United States. Received January 11, 1990.

origin: United States. cultivar: AVANTI. other id: PVP 9000059. source: Pending. group: PVPO. Cultivar. Seed.

PI 537110. Carthamus tinctorius L. ASTERACEAE Safflower

Donated by: Musa, G.L.C., CIANO, Cd. Obregon, Mexico, Yaqui Valley Agricultural Exp. Sta., Ciudad Obregon, Sonora, Mexico. remarks: Quiriego 88 Safflower. Received January 17, 1990.

PI 537110-continued

origin: Mexico. cultivar: QUIRIEGO 88. pedigree: CM-106-SI (1)1/PCOy/2/Gila, F4 single plant from segregating population managed by pedigree method selection. other id: CV-16. source: Crop Sci. 30(4):961 1990. group: CSR-SAFFLOWER. remarks: Cultivar with high yield and wide adaptability for commercial production in northwest Mexico. Flowering and maturity (145 days) intermediate. Flowers yellow in bud, full flower and wilt stage. Head diameter 2.7cm. Seed hull smooth and white. Seed yield and seed oil percentage over 3 years averaged 3020kg per hectare and 38.1%. Moderate resistance to Alternaria leaf spot and safflower rust. Annual. Cultivar. Seed.

PI 537111. Carthamus tinctorius L. ASTERACEAE Safflower

Donated by: Musa, G.L.C., CIANO, Cd. Obregon, Mexico, Yaqui Valley Agricultural Exp. Sta., Ciudad Obregon, Sonora, Mexico. remarks: Sahuaripa 88 Safflower. Received January 17, 1990.

origin: Mexico. cultivar: SAHUARIPA 88. pedigree: SI-CEN 1230/Gila, F3 single plant from segregating population managed by pedigree method selection. other id: CV-17. source: Crop Sci. 30(4):961 1990. group: CSR-SAFFLOWER. remarks: Cultivar with high yield and wide adaptability for commercial production in northwest Mexico. Flowering and maturity (150 days) intermediate. Flowers yellow in bud and full bloom stages and red when wilted. Average head diameter 2.7cm. Seed hulls smooth and white. Seed yield and seed oil percentage over 3 year averaged 2810kg per hectare and 38.5%. Resistant to leaf spot and safflower rust. Annual. Cultivar. Seed.

PI 537112. Arachis hypogaea L. FABACEAE Peanut

Donated by: Dwivedi, S. L., ICRISAT, Legumes Program, Patancheru, Andhra Pradesh, India. remarks: ICGV 87128 Peanut. Received January 17, 1989.

PI 537112-continued

donor id: ICSG 44. origin: India. cultivar: ICGV 87128. pedigree: Selected in natural hybrid population of Indian cultivar Robut 33-1 designated as (Robut 33-1)1-5-B1-B1-B1-B1-B1. other id: CV-37. source: Crop Sci. 30(4):959 1990. group: CSR-PEANUT. remarks: Spanish type with high yield for post rainy season cultivation in Gujarat state. Growth habit decumbent 2 to decumbent 3. Leaflets dark green, medium to small and elliptical. Days to maturity 120. Pods 2-seeded, small to medium, smooth with slight to moderate constriction. Seeds tan color. Seed weight 60g per 100. Seed oil content 49%. Seed protein 25%. Field tolerance to bud necrosis. Annual. Cultivar. Seed.

PI 537113. Pennisetum glaucum (L.) R. Br. POACEAE Pearl millet

Donated by: Rai, K.N., ICRISAT, Cereals Program, Patancheru, Andhra Pradesh, India. remarks: ICTP 8203 Pearl Millet. Received January 17, 1990.

origin: India. cultivar: ICTP 8203. pedigree: Random mating of 5 S2 progenies of an Iniari early maturing land race from northern Togo. other id: CV-2. source: Crop Sci. 30(4):959 1990. group: CSR-MILLET, PEARL. other id: Togo P8203. remarks: Cultivar with good yield and large grain size (>12g per 1000 seed). Plant height 1.5 to 1.6m. Days to 50% flowering 50 to 52 in Maharashtra and Andhra Pradesh. Head length 16 to 18cm, and compact to semi-compact. Grain dark gray, light gray when exposed to sunlight. Grain filling rapid. Maturity early. Resistant to downy mildew (Sclerospora graminicola). Annual. Cultivar. Seed.

PI 537114. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: Hurley, R.H., Lofts Seed, Inc., P.O. Box 146, Bound Brook, New Jersey, United States; and New Jersey Agr. Exp. Sta.. remarks: Tribute Tall Fescue. Received January 17, 1990.

PI 537114-continued

donor id: Lofts PL-1. origin: United States. cultivar: TRIBUTE. pedigree: Advanced synthetic cultivar selected from porgenies of 37 clones followed by 2 to 7 cycles of recurrent restricted phenotypic and genotypic selection. other id: CV-130. source: Crop Sci. 30(4):957 1990. group: CSR-OTHER GRASSES. other id: PVP 8800235. source: Pending. group: PVPO. remarks: Cultivar with attractive, persistant and moderately low growth habit. Plants moderately dark green with medium leaf texture and density. Winter hardiness, cold temperture color retention, and heat and drought tolerance good. Reproductive maturity medium late. Seedling vigor, wear tolerance good. Useful for production of medium-low maintenance turf in full sunlight or light to medium shade in tall fescue areas. Perennial. Cultivar. Seed.

PI 537115. Medicago sativa L. FABACEAE Alfalfa

Donated by: Viands, D.R., Cornell University Agric. Exp. Sta., Dept. of Plant Breeding and Biometry, Ithaca, New York, United States. remarks: Oneida VR Alfalfa. Received January 17, 1990.

donor id: NY 8301. origin: United States. cultivar: ONEIDA VR. pedigree: Oneida/Vertus followed by 2 cycles of phenotypic selection for wilt resistance. Germplasm Sources: Flemish 50%; Medicago varia 40%; Medicago falcata 8%; Ladak 2%. other id: CV-163. source: Crop Sci. 30(4):955 1990. group: CSR-ALFALFA. other id: PVP 8600011. source: Certificate in force. group: PVPO. remarks: Cultivar with high resistance to Verticillium wilt (Verticillium albo-atrum) and fusarium wilt (Fusarium oxysporum f. sp. medicaginis). Fall dormancy similar to Ranger. Flowers 69% purple, 31% variegated. Moderately resistant to anthracnose (Colletotrichum trifloii) and phytophthora root rot (Phytophthora megasperma f. sp. medicaginis). Perennial. Cultivar. Seed.

PI 537116. Avena sativa L. POACEAE Common oat

Donated by: Forsberg, R.A., Wisconsin Agr. Exp. Sta., University of Wisconsin, Madison, Wisconsin, United States. remarks: Horicon Oat. Received January 30, 1990.

PI 537116-continued

donor id: X4872-2. origin: United States. origin institute: Wisconsin Agr. Exp. Sta., University of Wisconsin - Madison, Madison, Wisconsin 53706. cultivar: HORICON. pedigree: Holden/Irr.-4/Garland/2/Hexiploid-amphiploid/2*CI6936 /3/Garland/5/Froker/Ogle. other id: PVP 9000076. source: Pending. group: PVPO. other id: CV-326. group: CSR-OAT. remarks: Cultivar with wide adaption, high yield and good performance under drought conditions. Maturity midseason. Kernels tan, florescent. Groat persentage high. Test weight average. Resistant to crown rust (Puccinia coronata). Moderate resistance to Wisconsin smut races (Ustilago avenae). Tolerance to barley yellow dwarf mosaic virus good. Spring Annual. Cultivar. Seed.

PI 537117 to 537126. Elytrigia intermedia (Host) Nevski POACEAE Intermediate wheatgrass

Donated by: Schulz-Schaeffer, J., Montana Agr. Exp. Sta., Montana State University, Bozeman, Montana, United States. remarks: Vegetatively Propagated Parental Lines (MT-6 to MT-15) of Intermediate Wheatgrass. Received January 23, 1990.

- PI 537117 origin: United States. origin institute: Montana Agr. Exp. Sta., Montana State University, Dept. of Plant and Soil Science, Bozeman, Montana 59717-0002. cultivar: MT-6. pedigree: Single plant selection from PI 400018. other id: PL-1. group: CSR-WHEATGRASS. remarks: Parental vegetatively propagated germplasm with good forage yield and extensive spread for breeding and experimental purposes. Vegetative cover for soil conservation good. received as: Agropyron intermedium. Perennial. Breeding Material. Plant.
- PI 537118 origin: United States. origin institute: Montana Agr. Exp. Sta., Montana State University, Dept. of Plant and Soil Science, Bozeman, Montana 59717-0002. cultivar: MT-7. pedigree: Single plant selection from PI 286118. other id: PL-2. group: CSR-WHEATGRASS. remarks: Parental vegetatively propagated germplasm with good forage yield and extensive spread for breeding and experimental purposes. Vegetative cover for soil conservation good. received as: Agropyron intermedium. Perennial. Breeding Material. Plant.

- PI 537119 origin: United States. origin institute: Montana Agr. Exp. Sta., Montana State University, Dept. of Plant and Soil Science, Bozeman, Montana 59717-0002. cultivar: MT-8. pedigree: Single plant selection from PI 273732. other id: PL-3. group: CSR-WHEATGRASS. remarks: Parental vegetatively propagated germplasm with good forage yield and extensive spread for breeding and experimental purposes. Vegetative cover for soil conservation good. received as: Agropyron intermedium. Perennial. Breeding Material. Plant.
- PI 537120 origin: United States. origin institute: Montana Agr. Exp. Sta., Montana State University, Dept. of Plant and Soil Science, Bozeman, Montana 59717-0002. cultivar: MT-9. pedigree: Single plant selection of PI 273733. other id: PL-4. group: CSR-WHEATGRASS. remarks: Parental vegetatively propagated germplasm with good forage yield and extensive spread for breeding and experimental purposes. Vegetative cover for soil conservation good. received as: Agropyron intermedium. Perennial. Breeding Material. Plant.
- PI 537121 origin: United States. origin institute: Montana Agr. Exp. Sta., Montana State University, Dept. of Plant and Soil Science, Bozeman, Montana 59717-0002. cultivar: MT-10. pedigree: Single plant selection from PI 440004. other id: PL-5. group: CSR-WHEATGRASS. remarks: Parental vegetatively propagated germplasm with good forage yield and extensive spread for breeding and experimental purposes. Vegetative cover for soil conservation good. received as: Agropyron intermedium. Perennial. Breeding Material. Plant.
- PI 537122 origin: United States. origin institute: Montana Agr. Exp. Sta., Montana State University, Department of Plant and Soil Science, Bozeman, Montana 59717-0002.

 cultivar: MT-11. pedigree: Single plant selection from PI 316122. other id: PL-6. group: CSR-WHEATGRASS. remarks: Parental vegetatively propagated germplasm with good forage yield and extensive spread for breeding and experimental purposes. Vegetative cover for soil conservation good. received as: Agropyron intermedium. Perennial. Breeding Material. Plant.

- PI 537123 origin: United States. origin institute: Montana Agr. Exp. Sta., Montana State University, Dept. of Plant and Soil Science, Bozeman, Montana 59717-0002. cultivar: MT-12. pedigree: Single plant selection from PI 228274. other id: PL-7. group: CSR-WHEATGRASS. remarks: Parental vegetatively propagated germplasm with good forage yield and extensive spread for breeding and experimental purposes. Vegetative cover for soil conservation good. received as: Agropyron intermedium. Perennial. Breeding Material. Plant.
- PI 537124 origin: United States. origin institute: Montana Agr. Exp. Sta., Montana State University, Dept. of Plant and Soil Science, Bozeman, Montana 59717-0002. cultivar: MT-13. pedigree: Single plant selection from PI 401017. other id: PL-8. group: CSR-WHEATGRASS. remarks: Parental vegetatively propagated germplasm with good forage yield and extensive spread for breeding and experimental purposes. Vegetative cover for soil conservation good. received as: Agropyron intermedium. Perennial. Breeding Material. Plant.
- PI 537125 origin: United States. origin institute: Montana Agr. Exp. Sta., Montana State University, Dept. of Plant and Soil Science, Bozeman, Montana 59717-0002. cultivar: MT-14. pedigree: Single plant selection from PI 173630. other id: PL-9. group: CSR-WHEATGRASS. remarks: Parental vegetatively propagated germplasm with good forage yield and extensive spread for breeding and experimental purposes. Vegetative cover for soil conservation good. received as: Agropyron intermedium. Perennial. Breeding Material. Plant.
- PI 537126 origin: United States. origin institute: Montana Agr. Exp. Sta., Montana State University, Dept. of Plant and Soil Science, Bozeman, Montana 59717-0002. cultivar: MT-15. pedigree: Single plant selection from PI 369174. other id: PL-10. group: CSR-WHEATGRASS. remarks: Parental vegetatively propagated germplasm with good forage yield and extensive spread for breeding and experimental purposes. Vegetative cover for soil conservation good. received as: Agropyron intermedium. Perennial. Breeding Material. Plant.
- PI 537127 to 537129. Medicago arabica (L.) Hudson FABACEAE

- PI 537127 to 537129-continued
 - PI 537127 donor id: 12. origin: UNKNOWN. Annual. Seed.
 - PI 537128 donor id: 1015. origin: Italy. collected: 1963. collector id: 1015. locality: Milano airport. Annual. Wild. Seed.
 - PI 537129 donor id: 1051. origin: Italy. collected: 1963. collector id: 1051. locality: Iglesias Arbus. Annual. Wild. Seed.
- PI 537130. Medicago blancheana Boiss. FABACEAE

Donated by: Seymour, P.N.D., Devonian Botanic Gardens, University of Alberta, Edmonton, Alberta, Canada. remarks: Code numbers refer to designations by K.A. Lesins, Dept. of Plant Science, University of Alberta, Canada. Received January 1987.

donor id: 1462. origin: Greece. collected: 1963.
collector id: 1462. locality: Xanthi. Annual. Wild.
Seed.

PI 537131. Medicago constricta Durieu FABACEAE

Donated by: Seymour, P.N.D., Devonian Botanic Gardens, University of Alberta, Edmonton, Alberta, Canada. remarks: Code numbers refer to designations by K.A. Lesins, Dept. of Plant Science, University of Alberta, Canada. Received January 1987.

donor id: 1208b. origin: Greece. collected: 1963.
collector id: 1208b. locality: Sea shore, Rhodes.
Annual. Wild. Seed.

PI 537132 to 537134. Medicago doliata Carmign. FABACEAE

- PI 537132 donor id: 1583. origin: Spain. collected: 1963. collector id: 1583. locality: Chiclana, Cadiz. remarks: Also contains 1584 and 1585 Medicago doliata. Annual. Wild. Seed.
- PI 537133 donor id: 2667. origin: Morocco. collected: 1974. collector id: 2667. locality: Road from Fes, 2km to Ras el Ma. Annual. Wild. Seed.

- PI 537132 to 537134-continued
 - PI 537134 donor id: 2747b. origin: Morocco. collected: 1974. collector id: 2747b. locality: Khatouat. Annual. Wild. Seed.
- PI 537135 to 537136. Medicago heyniana Greuter FABACEAE
 - **Donated by:** Seymour, P.N.D., Devonian Botanic Gardens, University of Alberta, Edmonton, Alberta, Canada. **remarks:** Code numbers refer to designations by K.A. Lesins, Dept. of Plant Science, University of Alberta, Canada. Received January 1987.
 - PI 537135 donor id: 2303. origin: Greece. collected: 1963. collector id: 2303. locality: Mt. Colla, Karpathos. Annual. Wild. Seed.
 - PI 537136 donor id: 2304. origin: Greece. collected: 1963. collector id: 2304. locality: Mt. Colla, Karpathos. Annual. Wild. Seed.
- PI 537137 to 537225. Medicago littoralis Rohde ex Lois. FABACEAE
 - Donated by: Seymour, P.N.D., Devonian Botanic Gardens, University of Alberta, Edmonton, Alberta, Canada. remarks: Code numbers refer to designations by K.A. Lesins, Dept. of Plant Science, University of Alberta, Canada. Received January 1987.
 - PI 537137 donor id: 259. origin: France. origin institute:
 Montpellier. origin institute id: 162. Annual. Seed.
 - PI 537138 donor id: 261. origin: Italy. origin institute: Botanical Garden, Palermo, Sicily. Annual. Seed.
 - PI 537139 donor id: 262. origin: Portugal. origin institute: Hortus Botanicus, Coimbra. Annual. Seed.
 - PI 537140 donor id: 263. origin: Italy. origin institute: Botanical Garden, Palermo, Sicily. Annual. Seed.
 - PI 537141 donor id: 264. origin: Italy. origin institute: Botanical Garden, Palermo, Sicily. Annual. Seed.
 - PI 537142 donor id: 267. origin: France. origin institute: Botanical Garden, Toulouse. Annual. Seed.
 - PI 537143 donor id: 268. origin: Italy. origin institute: Botanical Garden, Palermo, Sicily. Annual. Seed.
 - PI 537144 donor id: 269. origin: UNKNOWN. Annual. Seed.

- PI 537145 donor id: 272. origin: Portugal. origin institute: Hortus Botanicus, Coimbra. Annual. Seed.
- PI 537146 donor id: 273. origin: Italy. origin institute: Botanical Garden, Cagliari, Sardinia. Annual. Seed.
- PI 537147 donor id: 672. origin: Turkey. collected: 1962. collector id: 672. locality: Mersin plaja. Annual. Wild. Seed.
- PI 537148 donor id: 687. origin: Italy. collected: 1962. collector id: 687. locality: Pompey, Naples. Annual. Wild. Seed.
- PI 537149 donor id: 702. origin: Italy. collected: 1962. collector id: 702. locality: Itri, 126km S of Rome. Annual. Wild. Seed.
- PI 537150 donor id: 703. origin: Italy. collected: 1962. collector id: 703. locality: Itri, 126km S of Rome. Annual. Wild. Seed.
- PI 537151 donor id: 739. origin: Italy. collected: 1962. collector id: 739. locality: San Martino, Sicily. Annual. Wild. Seed.
- PI 537152 donor id: 851. origin: Turkey. collected: 1962. collector id: 851. locality: Karatas ('Adanna). Annual. Wild. Seed.
- PI 537153 donor id: 929. origin: Greece. collected: 1962. collector id: 929. locality: Mt. Lycabettus, Athens. Annual. Wild. Seed.
- PI 537154 donor id: 953. origin: Greece. collected: 1962. collector id: 953. locality: Korinthos. Annual. Wild. Seed.
- PI 537155 donor id: 981. origin: Italy. collected: 1962. collector id: 981. locality: Capri. Annual. Wild. Seed.
- PI 537156 donor id: 1000. origin: Italy. collected: 1962. collector id: 1000. locality: Ana, Capri. Annual. Wild. Seed.
- PI 537157 donor id: 1030. origin: Italy. collected: 1963. collector id: 1030. locality: Algeri airport, Sardinia. Annual. Wild. Seed.

- PI 537158 donor id: 1037. origin: Italy. collected: 1963. collector id: 1037. locality: Between Siliqua and Iglesias, Sardinia. Annual. Wild. Seed.
- PI 537159 donor id: 1086. origin: Italy. collected: 1963. collector id: 1086. locality: South Elina, before Quartu, Sardinia. Annual. Wild. Seed.
- PI 537160 donor id: 1113. origin: Greece. collected: 1963. collector id: 1113. locality: Iraklion, 24km, Crete. Annual. Wild. Seed.
- PI 537161 donor id: 1120. origin: Greece. collected: 1963. collector id: 1120. locality: West of Nicolavs, 29km, Crete. Annual. Wild. Seed.
- PI 537162 donor id: 1141. origin: Greece. collected: 1963. collector id: 1141. locality: Road to Critsa, Crete. Annual. Wild. Seed.
- PI 537163 donor id: 1182. origin: Greece. collected: 1963. collector id: 1182. locality: Sea shore, Kotzynos-Pyrgos, Crete. Annual. Wild. Seed.
- PI 537164 donor id: 1213. origin: Greece. collected: 1963. collector id: 1213. locality: From Rhodos sea shore, half way to Petatoides, Rhodes. Annual. Wild. Seed.
- PI 537165 donor id: 1232. origin: Greece. collected: 1963. collector id: 1232. locality: Old city, Kamiros, Rhodes. Annual. Wild. Seed.
- PI 537166 donor id: 1249. origin: Greece. collected: 1963. collector id: 1249. locality: Sea shore, across from old Rhodes cemetery, Rhodes. Annual. Wild. Seed.
- PI 537167 donor id: 1253. origin: Cyprus. collected: 1963. collector id: 1253. locality: Near Kythrea. Annual. Wild. Seed.
- PI 537168 donor id: 1254. origin: Cyprus. collected: 1963. collector id: 1254. locality: Near Kythrea. Annual. Wild. Seed.
- PI 537169 donor id: 1279. origin: Cyprus. collected: 1963. collector id: 1279. locality: Cape Andreas, near Monastery. Annual. Wild. Seed.
- PI 537170 donor id: 1320. origin: Lebanon. collected: 1963. collector id: 1320. locality: Fabougha road, between Dahrel Baider and Tabel Knisch. Annual. Wild. Seed.

- PI 537171 donor id: 1413. origin: Lebanon. collected: 1963. collector id: 1413. locality: Enfeh. Annual. Wild. Seed.
- PI 537172 donor id: 1514. origin: France. collected: 1963. collector id: 1514. locality: Cannes Cap Croisette. Annual. Wild. Seed.
- PI 537173 donor id: 1540. origin: Spain. collected: 1963. collector id: 1540. locality: Northeast of Barcelona, 50km. Annual. Wild. Seed.
- PI 537174 donor id: 1568. origin: Spain. collected: 1963. collector id: 1568. locality: Mataro, N of Barcelona. Annual. Wild. Seed.
- PI 537175 donor id: 1569a. origin: Spain. collected: 1963. collector id: 1569a. locality: Mataro, N of Barcelona. Annual. Wild. Seed.
- PI 537176 donor id: 1576. origin: Spain. collected: 1963. collector id: 1576. locality: Cadiz. Annual. Wild. Seed.
- PI 537177 donor id: 1606. origin: France. collected: 1963. collector id: 1606. locality: Biarretz, on way from Bayonne. Annual. Wild. Seed.
- PI 537178 donor id: 1624. origin: France. collected: 1963. collector id: 1624. locality: Towards St. Paul de Fe, 5km from Estagel. Annual. Wild. Seed.
- PI 537179 donor id: 1640. origin: France. collected: 1963. collector id: 1640. locality: Sea shore, Leucate. Annual. Wild. Seed.
- PI 537180 donor id: 1665. origin: France. collected: 1963. collector id: 1665. locality: Aleria. Annual. Wild. Seed.
- PI 537181 donor id: 1674. origin: France. collected: 1963. collector id: 1674. locality: Biguglia, Corsica. Annual. Wild. Seed.
- PI 537182 donor id: 1761. origin: Turkey. collected: 1963. collector id: 1761. locality: Stockholm. Annual. Wild. Seed.
- PI 537183 donor id: 1795. origin: Italy. collected: 1962. collector id: 1795. locality: San Martino, Sicily. Annual. Wild. Seed.

- PI 537184 donor id: 1920. origin: Canada. origin institute: Experimental Farm, Brandon, Manitoba. collected: 1965. remarks: Originally from Yugoslavia. Annual. Seed.
- PI 537185 donor id: 1921. origin: Canada. origin institute: Experimental Farm, Brandon, Manitoba. collected: 1965. remarks: Originally from Italy. Annual. Seed.
- PI 537186 donor id: 1922. origin: Canada. origin institute: Experimental Farm, Brandon, Manitoba. collected: 1965. remarks: Originally from France. Annual. Seed.
- PI 537187 donor id: 1923. origin: Canada. origin institute: Experimental Farm, Brandon, Manitoba. collected: 1965. remarks: Originally from Italy. Annual. Seed.
- PI 537188 donor id: 1924. origin: Canada. origin institute: Experimental Farm, Brandon, Manitoba. collected: 1965. remarks: Originally from Italy. Annual. Seed.
- PI 537189 donor id: 1925. origin: Canada. origin institute: Experimental Farm, Brandon, Manitoba. collected: 1965. Annual. Seed.
- PI 537190 donor id: 1926. origin: Canada. origin institute: Experimental Farm, Brandon, Manitoba. collected: 1965. remarks: Originally from Portugal. Annual. Seed.
- PI 537191 donor id: 1927. origin: Canada. origin institute: Experimental Farm, Brandon, Manitoba. collected: 1965. remarks: Originally from Italy. Annual. Seed.
- PI 537192 donor id: 1928. origin: Canada. origin institute: Experimental Farm, Brandon, Manitoba. collected: 1965. Annual. Seed.
- PI 537193 donor id: 2046. origin: Italy. collected: 1968. collector id: 2046. locality: Polermo. Annual. Wild. Seed.
- PI 537194 donor id: 2060. origin: Malta. collected: 1968. collector id: 2060. locality: Argotti Botanic Garden. Annual. Wild. Seed.
- PI 537195 donor id: 2066. origin: Italy. collected: 1968. collector id: 2066. locality: Pantelleria. Annual. Wild. Seed.
- PI 537196 donor id: 2067. origin: Italy. collected: 1968. collector id: 2067. locality: Pantelleria. Annual. Wild. Seed.

- PI 537197 donor id: 2068. origin: Italy. collected: 1968. collector id: 2068. locality: Pantelleria. Annual. Wild. Seed.
- PI 537198 donor id: 2069. origin: Italy. collected: 1968. collector id: 2069. locality: Pantelleria. Annual. Wild. Seed.
- PI 537199 donor id: 2101. origin: Malta. collected: 1968. collector id: 2101. locality: Marfa. Annual. Wild. Seed.
- PI 537200 donor id: 2126. origin: Italy. collected: 1968. collector id: 2126. locality: From Cerchiana, 46km to Tarento. Annual. Wild. Seed.
- PI 537201 donor id: 2127. origin: Italy. collected: 1968. collector id: 2127. locality: Pompeii. Annual. Wild. Seed.
- PI 537202 donor id: 2132. origin: Malta. collected: 1968. collector id: 2132. locality: Ghajn Tuffiema. Annual. Wild. Seed.
- PI 537203 donor id: 2141. origin: Italy. collected: 1968. collector id: 2141. locality: Massafra Bari. Annual. Wild. Seed.
- PI 537204 donor id: 2179. origin: Australia. collector id: 2179. locality: Massafra Bari. Annual. Seed.
- PI 537205 donor id: 2325. origin: Spain. collected: 1973. collector id: 2325. locality: Mogan, Gran Canaria. Annual. Wild. Seed.
- PI 537206 donor id: 2328. origin: Spain. collected: 1973. collector id: 2328. locality: Rocky hillside, 8km from Aguime to Santa Lucia, Gran Canaria. Annual. Wild. Seed.
- PI 537207 donor id: 2331. origin: Spain. collected: 1973. collector id: 2331. locality: Rocky hillside, Mogan, Gran Canaria. Annual. Wild. Seed.
- PI 537208 donor id: 2344. origin: Greece. collected: 1973. collector id: 2344. locality: Slope of mountain, not at higher level, Karpathos. Annual. Wild. Seed.
- PI 537209 donor id: 2350. origin: Greece. collected: 1973. collector id: 2350. locality: Beach, Lefkos, Karpathos. Annual. Wild. Seed.

- PI 537210 donor id: 2392. origin: Greece. collected: 1973. collector id: 2392. locality: Karpathos Airport, Karpathos. Annual. Wild. Seed.
- PI 537211 donor id: 2410. origin: Tunisia. collected: 1974. collector id: 2410. locality: From Sidi audet, 16km to Leslettia. Annual. Wild. Seed.
- PI 537212 donor id: 2419. origin: Tunisia. collected: 1974. collector id: 2419. locality: Road from Le Kef, 28km to Tajerouine. Annual. Wild. Seed.
- PI 537213 donor id: 2429. origin: Tunisia. collected: 1974. collector id: 2429. locality: Road from Tajerouine, 14km to Kalaa Khasba. Annual. Wild. Seed.
- PI 537214 donor id: 2442. origin: Tunisia. collected: 1974. collector id: 2442. locality: Ruins of Basilique seashore, Saint Cyprien. Annual. Wild. Seed.
- PI 537215 donor id: 2444. origin: Tunisia. collected: 1974. collector id: 2444. locality: Road from Feriana, 28km to Gafsa. Annual. Wild. Seed.
- PI 537216 donor id: 2445. origin: Tunisia. collected: 1974. collector id: 2445. locality: Road from Gabes, 65-67km to Medenine. Annual. Wild. Seed.
- PI 537217 donor id: 2457. origin: Tunisia. collected: 1974. collector id: 2457. locality: Road from Adjim, 7km to Houmt Souk, Island de Jerba. Annual. Wild. Seed.
- PI 537218 donor id: 2469. origin: Tunisia. collected: 1974. collector id: 2469. locality: Between Maktar and Kessera. Annual. Wild. Seed.
- PI 537219 donor id: 2471. origin: Tunisia. collected: 1974. collector id: 2471. locality: Road from Gabes, 47km to Medenine. Annual. Wild. Seed.
- PI 537220 donor id: 2510. origin: Algeria. collected: 1974. collector id: 2510. locality: Near Setif. Annual. Wild. Seed.
- PI 537221 donor id: 2512. origin: Algeria. collected: 1974. collector id: 2512. locality: Beach, El-Djemila. Annual. Wild. Seed.
- PI 537222 donor id: 2710a. origin: Morocco. collected: 1974. collector id: 2710a. locality: Road from El-Jadida, 24km to S. Smail. Annual. Wild. Seed.

- PI 537223 donor id: 2721. origin: Morocco. collected: 1974. collector id: 2721. locality: Road from Mtal to Marrakech. Annual. Wild. Seed.
- PI 537224 donor id: 2753. origin: Morocco. collected: 1974. collector id: 2753. locality: Road from Boulaouana, 56km to El-Jadida. Annual. Wild. Seed.
- PI 537225 donor id: 2781. origin: Morocco. collected: 1974. collector id: 2781. locality: Road from Temara to Ainel Aouda. Annual. Wild. Seed.

PI 537226. Medicago praecox DC. FABACEAE

Donated by: Seymour, P.N.D., Devonian Botanic Gardens, University of Alberta, Edmonton, Alberta, Canada. **remarks:** Code numbers refer to designations by K.A. Lesins, Dept. of Plant Science, University of Alberta, Canada. Received January 1987.

donor id: 957. origin: Greece. collected: 1962.
collector id: 957. locality: Korinthos. Annual. Wild.
Seed.

PI 537227 to 537235. Medicago rigidula (L.) All. FABACEAE

- PI 537227 donor id: 100c. origin: France. origin institute: Botanical Garden, Toulouse. Annual. Seed.
- PI 537228 donor id: 487. origin: Greece. collected: 1958. collector id: 20295. locality: Peloponnisos, Lauyada-Rubim. Annual. Wild. Seed.
- PI 537229 donor id: 639. origin: Turkey. collected: 1963. collector id: 639. locality: Mismis Village, Burc-Gaziantep. Annual. Wild. Seed.
- PI 537230 donor id: 820. origin: Turkey. collected: 1962. collector id: 820. locality: Cavundur ciftligi, 7km W of Ankara. Annual. Wild. Seed.
- PI 537231 donor id: 825. origin: Turkey. collected: 1962. collector id: 825. locality: Cavundur ciftligi, 7km W of Ankara. Annual. Wild. Seed.

PI 537227 to 537235-continued

- PI 537232 donor id: 829. origin: Turkey. collected: 1962. collector id: 829. locality: Cavundur ciftligi, 7km W of Ankara. Annual. Wild. Seed.
- PI 537233 donor id: 843. origin: Turkey. collected: 1962. collector id: 843. locality: Road to Haymana, 49km from Ankara. Annual. Wild. Seed.
- PI 537234 donor id: 1378. origin: Lebanon. collected: 1963. collector id: 1378. locality: Chtaura. Annual. Wild. Seed.
- PI 537235 donor id: 1764. origin: Turkey. collected: 1962. collector id: 1764. locality: Ankara-Haymana. Annual. Wild. Seed.
- PI 537236 to 537237. Medicago rotata Boiss. FABACEAE

Donated by: Seymour, P.N.D., Devonian Botanic Gardens, University of Alberta, Edmonton, Alberta, Canada. remarks: Code numbers refer to designations by K.A. Lesins, Dept. of Plant Science, University of Alberta, Canada. Received January 1987.

- PI 537236 donor id: 499. origin: Czechoslovakia. origin institute: Botanical Garden, Zabroda, Kosice. origin institute id: 538. Annual. Seed.
- PI 537237 donor id: 2003. origin: Syria. origin institute: Univ. of Aleppo. Annual. Seed.
- PI 537238 to 537239. Medicago secundiflora Durieu FABACEAE

- PI 537238 donor id: 553. origin: France. origin institute: Botanical Garden, Montpellier. Annual. Seed.
- PI 537239 donor id: 1914. origin: Canada. origin institute: Experimental Farm, Brandon, Manitoba. remarks: Originally from Morocco. Annual. Seed.

- PI 537240 to 537246. Medicago soleirolii Duby FABACEAE
 - Donated by: Seymour, P.N.D., Devonian Botanic Gardens, University of Alberta, Edmonton, Alberta, Canada. remarks: Code numbers refer to designations by K.A. Lesins, Dept. of Plant Science, University of Alberta, Canada. Received January 1987.
 - PI 537240 donor id: 567. origin: UNKNOWN. Annual. Seed.
 - PI 537241 donor id: 2398. origin: Algeria. collected: 1974. collector id: 2398. locality: Ain Seynour, 84.5km to 'Annaba on road from Soak-Abras. elevation: 720m. Annual. Wild. Seed.
 - PI 537242 donor id: 2399. origin: Algeria. collected: 1974. collector id: 2399. locality: Sandy ditch, war cemetery, 'Annaba. Annual. Wild. Seed.
 - PI 537243 donor id: 2793. origin: Australia. origin institute:
 Univ. of Australia. origin institute id: 5294. remarks:
 Originally from Malta. Annual. Seed.
 - PI 537244 donor id: 2795. origin: Australia. origin institute:
 Univ. of Australia. origin institute id: 315. remarks:
 Originally from Malta. Annual. Seed.
 - PI 537245 donor id: 2796. origin: Australia. origin institute:
 Univ. of Australia. origin institute id: 4363. remarks:
 Originally from Malta. Annual. Seed.
 - PI 537246 donor id: 2797. origin: Australia. origin institute:
 Univ. of Australia. origin institute id: 3084. remarks:
 Originally from Malta. Annual. Seed.
- PI 537247 to 537256. Medicago minima (L.) Bartal. FABACEAE
 - Donated by: Seymour, P.N.D., Devonian Botanic Gardens, University of Alberta, Edmonton, Alberta, Canada. remarks: Code numbers refer to designations by K.A. Lesins, Dept. of Plant Science, University of Alberta, Canada. Received January 1987.
 - PI 537247 donor id: 001. origin: Czechoslovakia. origin institute: Slovenska Akademia, Zabroda, Kosice. Annual. Seed.
 - PI 537248 donor id: 435. origin: Czechoslovakia. origin institute: Botanical Garden, Brno. received as: M. sessilis. Annual. Seed.
 - PI 537249 donor id: 1334. origin: Lebanon. collected: 1964. collector id: 1334. locality: Falougha road, between Dahrel Baidar and Tabal Knisch. received as: M. sessilis. Annual. Wild. Seed.

PI 537247 to 537256-continued

- PI 537250 donor id: 1337. origin: Lebanon. collected: 1964. collector id: 1337. locality: Near Sofar, across from the police house. received as: M. sessilis. Annual. Wild. Seed.
- PI 537251 donor id: 1338. origin: Lebanon. collected: 1964. collector id: 1338. locality: Near Sofar, across from the police house. received as: M. sessilis. Annual. Wild. Seed.
- PI 537252 donor id: 1435. origin: Turkey. collected: 1964. collector id: 1435. locality: Boln. received as: M. sessilis. Annual. Wild. Seed.
- PI 537253 donor id: 1633. origin: France. collected: 1963. collector id: 1633. locality: From Estagel to St. Paul, 5km. received as: M. sessilis. Annual. Wild. Seed.
- PI 537254 donor id: 1737. origin: Turkey. collector id: 858. locality: Taskopru, Eskesir Province. received as: M. sessilis. Annual. Wild. Seed.
- PI 537255 donor id: 1791. origin: Lebanon. collected: 1964. collector id: 1791. locality: Hammana, Beirut. received as: M. sessilis. Annual. Wild. Seed.
- PI 537256 donor id: 2415. origin: Tunisia. collected: 1974. collector id: 2415. locality: Road from Khalea Khasba, 2km to Thala. Annual. Wild. Seed.

PI 537257 to 537259. Medicago murex Willd. FABACEAE

- PI 537257 donor id: 335. origin: USSR. collected: 1961. locality: Ashkhabad. Annual. Wild. Seed.
- PI 537258 donor id: 989. origin: Italy. collected: 1962. collector id: 989. locality: Near Blue Grotto. Annual. Wild. Seed.
- PI 537259 donor id: 1981. origin: Australia. origin institute: Univ. of Australia, Nedlands. remarks: Originally from Germany. Annual. Seed.

PI 537260. Lolium multiflorum Lam. POACEAE Annual ryegrass

Donated by: Watson, Jr., C.E., Mississippi Agric. & Forestry Exp. Sta., Department of Agronomy, Mississippi State University, P.O. 5248, Mississippi State, Mississippi, United States. remarks: Jackson Annual Ryegrass Released in July 1989. Received January 30, 1990.

donor id: MRS-86-1. origin: United States. origin institute: Mississippi Agr. & Forestry Exp. Sta., Dept. of Agronomy, Mississippi State Univ., P.O. Box 5248, Mississippi State, Mississippi 39762-5248. cultivar: JACKSON. pedigree: Marshall selection utilizing 3 cycles of phenotypic recurrent selection for crown rust resistance. other id: PVP 8900327. source: Pending. group: PVPO. other id: CV-135. source: Crop Sci. 30(6):1368 1990. group: CSR-OTHER GRASSES. remarks: Cultivar very cold tolerant and resistant to crown rust (Puccinia coronata). Maturity intermediate to late. Dry matter forage yield and daily gain similar to Marshall. Annual. Cultivar. Seed.

PI 537261 to 537263. Triticum aestivum L. POACEAE Wheat

Donated by: Baenziger, P.S., Institute of Agric. & Natural Resources, Dept. of Agronomy, University of Nebraska, Lincoln, Nebraska, United States. Received January 23, 1990.

- PI 537261 origin: United States. cultivar: NE82438. pedigree:
 HiPlains/Wings/3/Parker*4/Agent/2/Belotzerkouskaia 198/
 Lancer. remarks: Semi-dwarf cultivar with good straw strength and winterhardiness. Yield high. Maturity late.
 Resistant to stem rust (Puccinia graminis) and Hessian fly (Mayetiola destructor). Moderately susceptible to leaf rust. Susceptible to wheat streak mosaic virus and wheat soilborne mosaic virus. Baking and milling quality good. Winter Annual. Breeding Material. Seed.
- PI 537262 origin: United States. cultivar: NE82533. pedigree:
 KS73167/Agate/2/Sage sib. remarks: Semi-dwarf with good straw strength and winterhardiness. Maturity medium-early. Resistant to stem rust (Puccinia graminis). Moderatele resistant to soilborne mosaic virus. Yield characteristics good. Susceptible to leaf rust and wheat streak mosaic virus. Winter Annual. Breeding Material. Seed.

- PI 537263 origin: United States. cultivar: NE84557. pedigree:
 Warrior/Scout/2/MoW6811/3/Agate sib/4/NE 68457/Centurk.
 remarks: Medium-tall cultivar with good straw strength,
 winterhardiness and yield. Maturity medium-late.
 Resistant to stem rust (Puccinia graminis). Susceptible
 to wheat soilborne mosaic virus, leaf rust and Hessian
 fly. Very susceaptible to wheat streak mosaic virus.
 Milling and baking quality excellent. Winter Annual.
 Breeding Material. Seed.
- PI 537264. Arachis hypogaea L. FABACEAE Peanut

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Washington State University, 59 Johnson Hall, Pullman, Washington, United States. Received January 04, 1989.

donor id: WKP-88-34. origin: Pakistan. collected: October 25, 1988. collector id: WKP-88-34. locality: Sandy soil, Kohat-Bannu Road, Kirpa Village, about 90km N of Bannu, Western Frontier Province. Annual. Cultivated. Seed.

PI 537265 to 537276. Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE Watermelon

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Washington State University, 59 Johnson Hall, Pullman, Washington, United States. Received January 04, 1989.

- PI 537265 donor id: WKP-88-45. origin: Pakistan. collected:
 October 26, 1988. collector id: WKP-88-45. locality:
 Base of sand dunes, Mankera Road, just before Village
 Sargay Walla, 20km to Gohar Walla, Punjab Province.
 remarks: Fruit small (0.5-2kg), sweet with whitish flesh
 and greenish rind. Seed collected from several fruits.
 Local type. Annual. Landrace. Seed.
- PI 537266 donor id: WKP-88-46. origin: Pakistan. collected:
 October 26, 1988. collector id: WKP-88-46. locality:
 Very sandy soil, Mankera Road, just north of Village
 Sargay Walla, 20km to Gohar Walla, Punjab Province.
 remarks: Fruit small (0.5-2kg), sweet with whitish flesh.
 Annual. Landrace. Seed.

- PI 537267 donor id: WKP-88-47. origin: Pakistan. collected:
 October 26, 1988. collector id: WKP-88-47. locality:
 Very sandy soil, Mankera Road, just north of the Village
 Sargay Walla, 20km to Gohar Walla, Ivan Buddenhagen's
 Thal, Punjab Province. remarks: Fruit small (0.5-2kg),
 sweet with whitish flesh. Seeds brownish. Local type.
 Annual. Landrace. Seed.
- PI 537268 donor id: WKP-88-48. origin: Pakistan. collected:
 October 26, 1988. collector id: WKP-88-48. locality:
 Very sandy soil, Mankera Road, just north of the Village
 Sargay Walla, 20km to Gohar Walla, Ivan Buddenhagen's
 Thal, Punjab Province. remarks: Fruit small (0.5-2kg),
 sweet with whitish flesh. Seeds reddish-brown. Annual.
 Landrace. Seed.
- PI 537269 donor id: WKP-88-49. origin: Pakistan. collected:
 October 26, 1988. collector id: WKP-88-49. locality:
 Very sandy soil, Mankera Road, just north of the Village
 Sargay Walla, 20km to Gohar Walla, Ivan Buddenhagen's
 Thal, Punjab Province. remarks: Fruit small, sweet with
 whitish flesh. Seeds reddish in color. Annual.
 Landrace. Seed.
- PI 537270 donor id: WKP-88-50. origin: Pakistan. collected:
 October 26, 1988. collector id: WKP-88-50. locality:
 Very sandy soil, Mankera Road, just north of the Village
 Sargay Walla, 20km to Gohar Walla, Ivan Buddenhagen's
 Thal, Punjab Province. remarks: Fruit small (0.5-2kg),
 sweet with whitish flesh. Seeds reddish in color. Local
 type. Annual. Landrace. Seed.
- PI 537271 donor id: WKP-88-51. origin: Pakistan. collected:
 October 26, 1988. collector id: WKP-88-51. locality:
 Very sandy soil, Mankera Road, just north of the Village
 Sargay Walla, 20km to Gohar Walla, Ivan Buddenhagen's
 Thal, Punjab Province. remarks: Fruit small (0.5-2kg),
 sweet with whitish flesh. Seeds reddish in color. Local
 type. Annual. Landrace. Seed.
- October 26, 1988. collector id: WKP-88-52. locality:
 Very sandy soil, Mankera Road, just north of the Village
 Sargay Walla, 20km to Gohar Walla, Ivan Buddenhagen's
 Thal, Punjab Province. remarks: Fruit small (0.5-2kg),
 sweet with whitish flesh. Seeds pinkish in color. Local
 type. Annual. Landrace. Seed.

PI 537265 to 537276-continued

- PI 537273 donor id: WKP-88-53. origin: Pakistan. collected:
 October 26, 1988. collector id: WKP-88-53. locality:
 Very sandy soil, Mankera Road, just north of the Village
 Sargay Walla, 20km to Gohar Walla, Ivan Buddenhagen's
 Thal, Punjab Province. remarks: Fruit small (0.5-2kg),
 sweet with whitish flesh. Seeds reddish in color. Local
 type. Annual. Landrace. Seed.
- PI 537274 donor id: WKP-88-54. origin: Pakistan. collected:
 October 26, 1988. collector id: WKP-88-54. locality:
 Very sandy soil, Mankera Road, just north of the Village
 Sargay Walla, 20km to Gohar Walla, Ivan Buddenhagen's
 Thal, Punjab Province. remarks: Fruit small (0.5-2kg),
 sweet with whitish flesh. Seeds pinkish in color. Local
 type. Annual. Landrace. Seed.
- PI 537275 donor id: WKP-88-55. origin: Pakistan. collected:
 October 26, 1988. collector id: WKP-88-55. locality:
 Very sandy soil, Mankera Road, just north of the Village
 Sargay Walla, 20km to Gohar Walla, Ivan Buddenhagen's
 Thal, Punjab Province. remarks: Fruit small (0.5-2kg),
 sweet with whitish flesh. Seeds brownish, deformed. Local
 type. Annual. Landrace. Seed.
- PI 537276 donor id: WKP-88-56. origin: Pakistan. collected:
 October 26, 1988. collector id: WKP-88-56. locality:
 Very sandy soil, Mankera Road, just north of the Village
 Sargay Walla, 20km to Gohar Walla, Ivan Buddenhagen's
 Thal, Punjab Province. remarks: Fruit small (0.5-2kg),
 sweet with whitish flesh. Seeds whitish in color. Local
 type. Annual. Landrace. Seed.

PI 537277. Citrullus sp. CUCURBITACEAE

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Washington State University, 59 Johnson Hall, Pullman, Washington, United States. Received January 04, 1989.

donor id: WKP-88-44. origin: Pakistan. collected: October 26, 1988. collector id: WKP-88-44. locality: Edge of irrigated mungbean field along Indus River near Bhakkar, Punjab Province. remarks: Seed collected from several small fruits of three plants. Annual. Landrace. Seed.

- PI 537278 to 537281. Cyamopsis tetragonoloba (L.) Taubert FABACEAE Guar
 - Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Washington State University, 59 Johnson Hall, Pullman, Washington, United States. Received January 04, 1989.
 - PI 537278 donor id: WKP-88-30. origin: Pakistan. collected:
 October 23, 1988. collector id: WKP-88-30. locality:
 Sandy soil, Gram Breeding Sub-Station, Attock, Punjab
 Province. remarks: Pods collected from many plants.
 Annual. Cultivated. Seed.
 - PI 537279 donor id: WKP-88-41. origin: Pakistan. collected:
 October 26, 1988. collector id: WKP-88-41. locality:
 Irrigated field near Bhakkar along Indus River, Punjab
 Province. remarks: Pods collected from many plants.
 Annual. Cultivated. Seed.
 - PI 537280 donor id: WKP-88-42. origin: Pakistan. collected:
 October 26, 1988. collector id: WKP-88-42. locality:
 Irrigated sandy field, Village Sara Krishna, 19km to
 Mankera on Bhakkar-Mankera road, Punjab Province.
 remarks: Pods collected from two upright tall plants.
 Annual. Cultivated. Seed.
 - PI 537281 donor id: WKP-88-43. origin: Pakistan. collected:
 October 26, 1988. collector id: WKP-88-43. locality:
 Irrigated sandy field, Village Sara Krishna, 19km to
 Mankera on Bhakkar-Mankera road, Punjab Province.
 remarks: Pods collected from two prostrate plants.
 Annual. Cultivated. Seed.
- PI 537282. Vigna aconitifolia (Jacq.) Marechal FABACEAE Mothbean

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Washington State University, 59 Johnson Hall, Pullman, Washington, United States. Received January 04, 1989.

donor id: WKP-88-33. origin: Pakistan. collected: October 25, 1988. collector id: WKP-88-33. locality: Approx. 13km to Jand on Rawalpindi-Jand Road, Punjab Province. remarks: Seeds donated by a farmer. Annual. Cultivated. Seed.

PI 537283. Vigna radiata (L.) R. Wilczek FABACEAE Mungbean

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Washington State University, 59 Johnson Hall, Pullman, Washington, United States. Received January 04, 1989.

PI 537283-continued

donor id: WKP-88-40. origin: Pakistan. collected: October 25, 1988. collector id: WKP-88-40. locality: Irrigated sandy field along Indus River near Bhakkar, Punjab Province. remarks: Seeds collected from many plants. Annual. Cultivated. Seed.

PI 537284. Vigna umbellata (Thunb.) Ohwi & H. Ohashi FABACEAE Ricebean

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Washington State University, 59 Johnson Hall, Pullman, Washington, United States. Received January 04, 1989.

donor id: WKP-88-24. origin: Pakistan. collected: October 22, 1988. collector id: WKP-88-24. locality: Planting at National Agricultural Research Center (NARC), Islamabad, Punjab Province. Annual. Cultivated. Seed.

PI 537285. Glycine tabacina (Labill.) Benth. FABACEAE

Donated by: Yeh, M.S., National Chung-Hsing University, Taichung, Taiwan. Received May 05, 1988.

origin: Taiwan. collected: December 1982. other id: IL 870. Wild. Seed.

PI 537286 to 537293. Glycine tabacina (Labill.) Benth. FABACEAE

Donated by: Hymowitz, T., Dept. of Agronomy, University of Illinois, 1102 S. Goodwin Ave., Urbana, Illinois, United States. Received May 05, 1988.

- PI 537286 origin: Taiwan. collected: April 07, 1988. other id: IL 875. locality: Parking lot, Branch Station, Makung Penghu, Pescadores Islands. remarks: 2N=80. Wild. Seed.
- PI 537287 origin: Taiwan. collected: April 07, 1988. other id: IL 876. locality: Military area, Sea Stride (Penghu Bridge), Paisha Island, Pescadores Islands. Wild. Seed.
- PI 537288 origin: Taiwan. collected: April 07, 1988. other id: IL 877. locality: Rocky field, Takoye, Hsiaomen Island, Pescadores Islands. Wild. Seed.
- PI 537289 origin: Taiwan. collected: April 07, 1988. other id: IL 878. locality: Hillside by Hsitai Fort, Hsiyu Island, Pescadores Islands. Wild. Seed.

- PI 537286 to 537293-continued
 - PI 537290 origin: Taiwan. collected: April 08, 1988. other id: IL 879. locality: Hillside by lighthouse on SW end of Hsiyu Island, Pescadores Islands. Wild. Seed.
 - PI 537291 origin: Taiwan. collected: April 08, 1988. other id: IL 880. locality: Roadside, near Makung Airport, Penghu Island, Pescadores Islands. Wild. Seed.
 - PI 537292 origin: Taiwan. collected: April 08, 1988. other id: IL 882. locality: High point of grassy area in NW Chumei Island, Pescadores Islands. Wild. Seed.
 - PI 537293 origin: Taiwan. collected: April 08, 1988. other id: IL 883. locality: Near tomb of Seven Beauties, Chumei Island, Pescadores Islands. Wild. Seed.
- PI 537294. Glycine tomentella Hayata FABACEAE

Donated by: Grace, J., Division of Plant Industry, CSIRO, Canberra City, A.C.T, Australia. Received May 05, 1988.

donor id: 0555. origin: Australia. collector id: 0555.
other id: IL 868. locality: State forest, 1 km from
Alice's Well towards Baradene. remarks: 2n=78. Wild.
Seed.

PI 537295 to 537298. Stokesia laevis (Hill) E. Greene ASTERACEAE Stokes aster

Donated by: Campbell, T.A., Germplasm Quality and Enhancement Lab., USDA-ARS, Bldg. 001, Rm. 339, Beltsville Agric. Res. Center, Beltsville, Maryland, United States. remarks: Formally released by the Agricultural Research Service, USDA on August 11, 1989. Received February 01, 1990.

- PI 537295 donor id: BSLE1. origin: United States. pedigree:
 Intercross of 81 plants selected from several PI's on
 basis of general appearance, productivity, seed
 retention, and seeding vigor. remarks: Flowers
 cross-pollinated. Morphologically suitable for machine
 harvest. Perennial. Breeding Material. Seed.
- PI 537296 donor id: BSLE2. origin: United States. pedigree:
 Intercross of 340 vigorous plants selected from several
 PI's on basis of general appearance, productivity, seed
 retention, and seeding vigor. remarks: Flowers
 cross-pollinated. Morphologically suitable for machine
 harvest. Perennial. Breeding Material. Seed.

PI 537295 to 537298-continued

- PI 537297 donor id: BSLL1. origin: United States. pedigree:
 Intercross of 190 plants selected from several PI's on
 basis of general appearance, seed production, seed
 retention, and seedling vigor. remarks: Flowers
 cross-pollinated. Morphologically suitable for machine
 harvest. Perennial. Breeding Material. Seed.
- PI 537298 donor id: BSLL2. origin: United States. pedigree:
 Intercross of 58 vigorous plants select6ed from 17 PI's
 for seeding vigor. remarks: Flowers cross-pollinated.
 Morphologically suitable for machine harvest. Perennial.
 Breeding Material. Seed.
- PI 537299. Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE Watermelon

Donated by: Simon, P. W., USDA-ARS, Department of Horticulture, University of Wisconsin, Madison, Wisconsin, United States; and Pike, L., Department of Horticulture, Texas A & M University, College Station, Texas, United States; and Swenson, J. F., 245 Hawthorne, Glencoe, Illinois, United States. Received September 06, 1989.

donor id: U034. origin: USSR. cultivar: MRAMORNY. local name: Marble. collector id: U034. locality: Samarkand, Uzbek. latitude: 67 deg. 00 min. N. longitude: 39 deg. 40 min. E. remarks: VIR (Pangalo) released in late 1940's. received as: C. aedulis. Annual. Cultivar. Seed.

PI 537300. Citrullus sp. CUCURBITACEAE

Donated by: Simon, P. W., USDA-ARS, Department of Horticulture, University of Wisconsin, Madison, Wisconsin, United States; and Pike, L., Department of Horticulture, Texas A & M University, College Station, Texas, United States; and Swenson, J. F., 245 Hawthorne, Glencoe, Illinois, United States. Received September 06, 1989.

donor id: U020. origin: USSR. local name: At turshak (horse sour). collected: July 14, 1987. collector id: U020. locality: Tarkmen Botanical Garden, Ashkhabad. latitude: 58 deg. 20 min. N. longitude: 38 deg. 00 min. E. elevation: 400m. remarks: Watermelon progenator. Annual. Wild. Seed.

PI 537301. UNIDENT-Fabaceae sp. FABACEAE

Donated by: Simon, P. W., USDA-ARS, Department of Horticulture, University of Wisconsin, Madison, Wisconsin, United States; and Pike, L., Department of Horticulture, Texas A & M University, College Station, Texas, United States; and Swenson, J. F., 245 Hawthorne, Glencoe, Illinois, United States. Received September 06, 1989.

donor id: U095. origin: USSR. collected: July 28, 1989.
collector id: U095. locality: Pskem, Uzbek. latitude:
10 deg. 20 min. N. longitude: 41 deg. 40 min. E.
elevation: 1700m. remarks: Ten plants sampled from
population >1000. Annual. Wild. Seed.

PI 537302. Brassica napus L. BRASSICACEAE Rape

Donated by: Beversdorf, W.D., University of Guelph, Ontario Ministry of Agriculture and Food, Crop Science Dept., Guelph, Ontario, Canada. remarks: Winfield Winter Rapeseed. Received February 07, 1990.

origin: Canada. origin institute: Crop Science Dept., University of Guelph, Ontario Ministry of Agriculture and Food, Ontario NlG 2Wl. cultivar: WINFIELD. pedigree: F5-derived line from Elena x Herkules. other id: PVP 9000132. source: Pending. group: PVPO. other id: CV-7. source: Crop Sci. 30(6):1356 1990. group: CSR-RAPESEED. remarks: Maturity early. Height average for standard types. Seed size 3.7g/1000. Oil content high (45-48%). Erucic acid less than 1%. Moderately resistant to frost. Susceptible to atrazine. Susceptible to or low resistance to blackleg caused by Leptosphaeria maculans (a.k.a. Phoma lingam). Winter Annual. Cultivar. Seed.

PI 537303. Triticum aestivum L. POACEAE Common wheat

Donated by: Souza, E., Idaho Agr. Exp. Sta., Aberdeen Research and Extension Center, Aberdeen, Idaho, United States; **and** Agricultural Research Service -- USDA. **remarks:** Centennial Wheat. Received February 07, 1990.

PI 537303-continued

origin: United States. origin institute: Idaho Agr. Exp. Sta., Aberdeen Res. and Ext. Ctr., Aberdeen, Idaho 83210. cultivar: CENTENNIAL. pedigree: Cowbird(Sib)/Sterling,Fl. other id: PVP 9000218. source: Pending. group: PVPO. other id: CV-760. group: CSR-WHEAT. remarks: Semi-dwarf similar in height to Penawawa under irrigation and 5-10cm taller than Penawawa under dryland conditions at Tetonia, ID. Auricles pubescent, purple. Leaves semi-erect, short flag. Plant color dark green at heading. Heads short, ovate, awned. Anthers yellow, lacking purple pigmentation. Glumes glabrous, non-waxy. Chaff color whitish-yellow at maturity. Lodging resistance superior to Treasure and. Cultivar. Seed.

PI 537304. Poa pratensis L. POACEAE Kentucky bluegrass

Donated by: Brede, A. D., Jacklin Seed Company, W. 5300 Riverbend Ave., Post Falls, Idaho, United States. remarks: Dawn Kentucky Bluegrass. Received February 07, 1990.

origin: United States. origin institute: Jacklin Seed Company, W. 5300 Riverbend Ave., Post Falls, Idaho 83854. cultivar: DAWN. pedigree: NJE P-120/PSU K-106. other id: PVP 8800062. source: Certificate in force. group: PVPO. other id: CV-43. source: Crop Sci. 30(6):1359 1990. group: CSR-BLUEGRASS. remarks: Moderately low-growing turf type. Attractive color in early spring and retains good color during cold weather. Produces persistent, moderately aggressive turf of medium texture, medium-high density, and attractive, dark green color. Good resistance to leaf spot and melting-out disease and moderately good resistance to stem rust caused by P. graminis. Reproductive maturity is medium late. Cultivar. Seed.

PI 537305. Hordeum vulgare L. POACEAE Barley

Donated by: Schaller, C.W., California Agr. Exp. Sta., University of California, Davis, California, United States. remarks: UC 337 Barley. Received February 07, 1990.

origin: United States. cultivar: UC 337. pedigree: Sutter/Numar/2/Numar*4/White Mildew Resistant California Mariout (California Mariout*4 CIho 1179/2/2* California Mariout *6/Mariout), F5. other id: CV-218. source: Crop Sci. 30(5):1154 1990. group: CSR-BARLEY. remarks: 6-row feed type cultivar with medium-early maturity, high grain yield, good stand ability and good field resistance to scald (Rhynchosporium secalis), net blotch (Pyrenophora teres), and barley yellow dwarf virus. Spike medium-dense and semi-erect. Kernels have blue aleurone. Cultivar. Seed.

PI 537306. Hordeum vulgare L. POACEAE Barley

Donated by: Schaller, C.W., California Agr. Exp. Sta., University of California, Davis, California, United States. remarks: UC 476 Barley. Received February 07, 1990.

origin: United States. cultivar: UC 476. pedigree: Sutter/Briggs/2/Prato Sib, F6. other id: CV-219. source: Crop Sci. 30(5):1154 1990. group: CSR-BARLEY. remarks: 6-row feed type cultivar with good grain yield and moderately strong straw strength. Maturity medium-late. Height medium. Spike medium-dense and semi-erect. Kernel aleurone white. Resistance to scald (Rhynchosporium secalis) and barley yellow dwarf virus. Moderate resistance to net blotch (Pyrenophora teres), powdery mildew (Erysiphe graminis f. sp. hordei and leaf rust (Puccinia hordei). Cultivar. Seed.

PI 537307. Triticum aestivum L. POACEAE Common wheat

Donated by: Sadasivaiah, R.S., Lethbridge Res. Sta. -Agriculture Canada, P.O. Box 3000, Main, Lethbridge, Alberta, Canada. remarks: SWS-52 Soft White Spring Wheat. Received February 07, 1990.

origin: Canada. origin institute: Agriculture Canada Researach Station, P.O. Box 3000, Main, Lethbridge, Alberta TlJ 4Bl. cultivar: SWS-52. pedigree: F4 bulk of unknown crosses. other id: CV-755. group: CSR-WHEAT. remarks: Awned, stiff straw, brown chaff when mature. Out yields check cultivars Owens and Fielder. Height 78cm. Maturity 5 to 6 days later than checks. Resistant to lodging and shattering. Resistant to prevalent races of stripe rust (Puccinia striiformis). Moderate resistance to black point (Alternaria alternata) and common bunt (Tilletia laevis and T. tritici). Highly susceptible to loose smut (Puccinia. Spring Annual. Cultivar. Seed.

PI 537308 to 537309. Sorghum bicolor (L.) Moench POACEAE Milo

Donated by: Duncan, R.R., Georgia Agr. Exp. Sta., Dept. of Agronomy, University of Georgia, Griffin, Georgia, United States; and Colorado State University. remarks: GATCCP 100/101 Fall Armyworm Resistant Sorghum Germplasm. Received February 07, 1990.

- PI 537308 origin: United States. origin institute: Georgia Agr. Exp. Sta., Univ. of Georgia, Dept. of Agronomy, Griffin, Georgia 30223-1797. cultivar: GATCCP 100. pedigree: Originated from Hegari (S.P.I. 22326). other id: GP-312. source: Crop Sci. 31(1):242 1991. group: CSR-SORGHUM. remarks: Tissue culture (mature embryo) regenerated somaclonal variants from Hegari. Resistance to fall armyworm (Spodoptera frugiperda) foliar feeding of juvenile stage sorghum. Phenotypically similar to nonregenerated Hegari. Spring Annual. Breeding Material. Seed.
- PI 537309 origin: United States. origin institute: Georgia Agr. Exp. Sta., Univ. of Georgia, Dept. of Agronomy, Griffin, Georgia 30223-1797. cultivar: GATCCP 101. pedigree: Originated from Hegari (S.P.I. 22326). other id: GP-313. source: Crop Sci. 31(1):242 1991. group: CSR-SORGHUM. remarks: Tissue culture (mature embryo) regenerated somaclonal variants from Hegari. Resistance to fall armyworm (Spodoptera frugiperda) foliar feeding of juvenile stage sorghum. Phenotypically similar to nonregenerated Hegari. Spring Annual. Breeding Material. Seed.

PI 537310. Triticum durum Desf. POACEAE Durum wheat

Donated by: McLeod, J.G., Swift Current Res. Sta.-Agric. Canada, P.O. Box 1030, Swift Current, Saskatchewan, Canada. remarks: Kyle Wheat. Received February 07, 1990.

origin: Canada. origin institute: Agriculture Canada Research Station, P.O. Box 1030, Swift Current, Saskatchewan. cultivar: KYLE. pedigree: Wakooma/DT322//Wakooma/DT320. other id: CV-754. source: Crop Sci. 31(1):236 1991. group: CSR-WHEAT. remarks: Adapted to chernozem soils of Canadian Prairies. Resistant to prevalent races of leaf and stem rust (caused by Puccinia recondita and P. graminis), and bunt (caused by Tilletia foetida and T. caries). Moderately susceptible to tan spot (caused by Pyrenophora tritici-repentis). Moderately resistant to kernel smudge and root rot (caused by Cochiobolus sativus) and Septoria leaf spot (caused by. received as: T. turgidum L. var. durum. Cultivar. Seed.

- PI 537311. Elymus glaucus Buckley POACEAE
 - Donated by: Jones, T.A., Forage and Range Research Lab., USDA-ARS, Utah State University, Logan, Utah, United States. Received December 1989.
 - donor id: T-304. origin: United States. collector id: T-304. other id: W6 2564. group: W6. locality: Riggins. Wild. Seed.
- PI 537312 to 537315. Elymus lanceolatus (Scribner & J. G. Smith) Gould POACEAE
 - Donated by: Jones, T.A., Forage and Range Research Lab., USDA-ARS, Utah State University, Logan, Utah, United States. Received December 1989.
 - PI 537312 donor id: A-25. origin: United States. collector id: A-25. other id: W6 2570. group: W6. locality: Ten km S of Mountain City, Hwy 11-A. received as: E. lanceolatus subsp. wawawai. Wild. Seed.
 - PI 537313 donor id: T-12. origin: United States. collector id: T-12. other id: W6 2624. group: W6. locality: Between Clarkston and Wawawi. received as: E. lanceolatus subsp. wawawai. Wild. Seed.
 - PI 537314 donor id: T-572. origin: United States. collector id: T-572. other id: W6 2571. group: W6. locality: Hwy 14, 4.8km E of Roosevelt. received as: E. lanceolatus subsp. wawawai. Wild. Seed.
 - PI 537315 donor id: T-580. origin: United States. collector id: T-580. other id: W6 2572. group: W6. locality: Hwy 12, 32km E of Pataha. received as: E. lanceolatus subsp. wawawai. Wild. Seed.
- PI 537316 to 537320. Elymus lanceolatus (Scribner & J. G. Smith) Gould subsp. lanceolatus POACEAE
 - Donated by: Jones, T.A., Forage and Range Research Lab., USDA-ARS, Utah State University, Logan, Utah, United States. Received December 1989.
 - PI 537316 donor id: A-8. origin: United States. collector id: A-8. other id: W6 2565. group: W6. locality: Hwy 6-50, 16km N of Lyndylli. Wild. Seed.
 - PI 537317 donor id: A-60. origin: United States. collector id: A-60. other id: W6 2566. group: W6. locality: North of Howell. Wild. Seed.

- PI 537316 to 537320-continued
 - PI 537318 donor id: T-29. origin: United States. collector id: T-29. other id: W6 2567. group: W6. locality: Hwy 233, 0.8km N of I-80. Wild. Seed.
 - PI 537319 donor id: T-575. origin: United States. collector id: T-575. other id: W6 2568. group: W6. locality: Hwy 233, 0.8km N of I-80. Wild. Seed.
 - PI 537320 donor id: T-576. origin: United States. collector id: T-576. other id: W6 2569. group: W6. locality: Hwy 395, 4km N of Oregon border. Wild. Seed.
- PI 537321 to 537322. Elymus trachycaulus subsp. subsecundus (Link)
 Gould POACEAE

Donated by: Jones, T.A., Forage and Range Research Lab., USDA-ARS, Utah State University, Logan, Utah, United States. Received December 1989.

- PI 537321 donor id: A-54. origin: United States. collector id: A-54. other id: W6 2574. group: W6. locality: W of Scofield Reservoir. Wild. Seed.
- PI 537322 donor id: A-58. origin: United States. collector id: A-58. other id: W6 2575. group: W6. locality: Wasatch Park, Heber City. Wild. Seed.
- PI 537323. Elymus trachycaulus (Link) Gould ex Shinn. subsp. trachycaulus POACEAE

Donated by: Jones, T.A., Forage and Range Research Lab., USDA-ARS, Utah State University, Logan, Utah, United States. Received December 1989.

donor id: A-35. origin: United States. collector id:
A-35. other id: W6 2573. group: W6. locality: S slope
of Uinta Mountains. Wild. Seed.

PI 537324 to 537356. Leymus cinereus (Lams.-Scribn. & Merr.) A. Love POACEAE Basin wildrye

Donated by: Jones, T.A., Forage and Range Research Lab., USDA-ARS, Utah State University, Logan, Utah, United States. Received December 1989.

PI 537324 donor id: A-2. origin: United States. collector id: A-2. other id: W6 2576. group: W6. locality: 1.6km N of Beaver Dam. Wild. Seed.

- PI 537325 donor id: A-3. origin: United States. collector id: A-3. other id: W6 2577. group: W6. locality: 8km W of Snowville. Wild. Seed.
- PI 537326 donor id: A-4. origin: United States. collector id: A-4. other id: W6 2577. group: W6. locality: Hwy 30, 8km W of Utah border. Wild. Seed.
- PI 537327 donor id: A-15. origin: United States. collector id: A-15. other id: W6 2579. group: W6. locality: Hwy 21, 8km N of Crescent Valley. Wild. Seed.
- PI 537328 donor id: A-16. origin: United States. collector id: A-16. other id: W6 2580. group: W6. locality: W of Beowawe. Wild. Seed.
- PI 537329 donor id: A-19. origin: United States. collector id: A-19. other id: W6 2581. group: W6. locality: 3.2km W of Battle Mountains. Wild. Seed.
- PI 537330 donor id: A-23. origin: United States. collector id: A-23. other id: W6 2582. group: W6. locality: 3.2km S of Mill City. Wild. Seed.
- PI 537331 donor id: A-24. origin: United States. collector id: A-24. other id: W6 2583. group: W6. locality: Union Ghost Town, near Hwy 50. Wild. Seed.
- PI 537332 donor id: A-28. origin: United States. collector id: A-28. other id: W6 2584. group: W6. locality: Humboldt Natl. Forest, N of Winnemucca. Wild. Seed.
- PI 537333 donor id: A-29. origin: United States. collector id: A-29. other id: W6 2585. group: W6. locality: Hwy ll, l.6km N of Halleck. Wild. Seed.
- PI 537334 donor id: A-31. origin: United States. collector id: A-31. other id: W6 2586. group: W6. locality: 8km NE of Montello. Wild. Seed.
- PI 537335 donor id: A-32. origin: United States. collector id: A-32. other id: W6 2587. group: W6. locality: Hwy 30, 8km NE of Nevada border. Wild. Seed.
- PI 537336 donor id: A-36. origin: United States. collector id: A-36. other id: W6 2588. group: W6. locality: Hwy 26, 64km E of Arco. Wild. Seed.
- PI 537337 donor id: A-44. origin: United States. collector id: A-44. other id: W6 2589. group: W6. locality: Weston. Wild. Seed.

- PI 537338 donor id: A-47. origin: United States. collector id: A-47. other id: W6 2590. group: W6. locality: 12.8km NE of Green River. Wild. Seed.
- PI 537339 donor id: A-49. origin: United States. collector id: A-49. other id: W6 2591. group: W6. locality: Anaconda. Wild. Seed.
- PI 537340 donor id: A-52. origin: United States. collector id: A-52. other id: W6 2592. group: W6. locality: Anaconda. Wild. Seed.
- PI 537341 donor id: A-55. origin: United States. collector id: A-55. other id: W6 2593. group: W6. locality: 16km N of Rexburg. Wild. Seed.
- PI 537342 donor id: A-56. origin: United States. collector id: A-56. other id: W6 2594. group: W6. locality: Hwy 33, N of Kemmerer. Wild. Seed.
- PI 537343 donor id: A-67. origin: United States. collector id: A-67. other id: W6 2595. group: W6. locality: E Boise River, near Hwy 21, Boise. Wild. Seed.
- PI 537344 donor id: A-71. origin: United States. collector id: A-71. other id: W6 2596. group: W6. locality: S of Boise. Wild. Seed.
- PI 537345 donor id: A-72. origin: United States. collector id: A-72. other id: W6 2597. group: W6. locality: Airport, S of Boise. Wild. Seed.
- PI 537346 donor id: A-73. origin: United States. collector id: A-73. other id: W6 2598. group: W6. locality: 1.6km N of Ironside. Wild. Seed.
- PI 537347 donor id: A-76. origin: United States. collector id: A-76. other id: W6 2598. group: W6. locality: 4.8km N of Howell. Wild. Seed.
- PI 537348 donor id: A-81. origin: United States. collector id: A-81. other id: W6 2600. group: W6. locality: Benson. Wild. Seed.
- PI 537349 donor id: A-83. origin: United States. collector id: A-83. other id: W6 2601. group: W6. locality: Benson. Wild. Seed.
- PI 537350 donor id: T-4. origin: United States. collector id: T-4. other id: W6 2627. group: W6. locality: Between Fairfield and Corral. Wild. Seed.

PI 537324 to 537356-continued

- PI 537351 donor id: T-18. origin: United States. collector id: T-18. other id: W6 2628. group: W6. locality: 8km S of Adams. Wild. Seed.
- PI 537352 donor id: T-19. origin: United States. collector id: T-19. other id: W6 2629. group: W6. locality: S edge of Adams. Wild. Seed.
- PI 537353 donor id: T-23. origin: United States. collector id: T-23. other id: W6 2630. group: W6. locality: Roadside, I-84 at New Plymouth road exit. Wild. Seed.
- PI 537354 donor id: T-25. origin: United States. collector id: T-25. other id: W6 2631. group: W6. locality: 3.2km NE of Eureka. Wild. Seed.
- PI 537355 donor id: T-44. origin: United States. collector id: T-44. other id: W6 2632. group: W6. locality: 48km NW of Eureka. Wild. Seed.
- PI 537356 donor id: T-54. origin: United States. collector id: T-54. other id: W6 2626. group: W6. locality: 8km N of Secret Pass. Wild. Seed.
- PI 537357 to 537360. Leymus triticoides (Buckley) Pilg. POACEAE Beardless wildrye

Donated by: Jones, T.A., Forage and Range Research Lab., USDA-ARS, Utah State University, Logan, Utah, United States. Received December 1989.

- PI 537357 donor id: A-11. origin: United States. collector id: A-11. other id: W6 2604. group: W6. locality: 1.6km E of Valmy. Wild. Seed.
- PI 537358 donor id: A-19. origin: United States. collector id: A-19. other id: W6 2605. group: W6. locality: Hwy 140, 17.6km S of Orovada. Wild. Seed.
- PI 537359 donor id: A-30. origin: United States. collector id: A-30. other id: W6 2606. group: W6. locality: N of Jamison. Wild. Seed.
- PI 537360 donor id: A-31. origin: United States. collector id: A-31. other id: W6 2607. group: W6. locality: Hwy 78, 3.2km S of Melba. Wild. Seed.

- PI 537361 to 537363. Leymus hybrid POACEAE
 - Donated by: Jones, T.A., Forage and Range Research Lab., USDA-ARS, Utah State University, Logan, Utah, United States. Received December 1989.
 - PI 537361 donor id: A-5. origin: United States. pedigree: L. cinereus/L. triticoides. collector id: A-5. other id: W6 2602. group: W6. locality: Battle Mountain. Wild. Seed.
 - PI 537362 donor id: T-45. origin: United States. pedigree: L. cinereus/L. triticoides. collector id: T-45. other id: W6 2625. group: W6. locality: North side of Eureka. Wild. Seed.
 - PI 537363 donor id: T-48. origin: United States. pedigree: L. cinereus/L. triticoides. collector id: T-48. other id: W6 2603. group: W6. locality: N of Eureka. Wild. Seed.
- PI 537364 to 537389. Elytrigia spicata (Pursh) D. R. Dewey POACEAE
 - Donated by: Jones, T.A., Forage and Range Research Lab., USDA-ARS, Utah State University, Logan, Utah, United States. Received December 1989.
 - PI 537364 donor id: A-37. origin: United States. collector id: A-37. other id: W6 2608. group: W6. locality: 8km W of Arco. received as: Pseudoroegneria spicata. Wild. Seed.
 - PI 537365 donor id: A-62. origin: United States. collector id: A-62. other id: W6 2609. group: W6. locality: Canyon between Brigham City and Logan. received as: Pseudoroegneria spicata. Wild. Seed.
 - PI 537366 donor id: T-3. origin: United States. collector id: T-3. other id: W6 2633. group: W6. locality: W of Magic Reservoir. received as: Pseudoroegneria spicata. Wild. Seed.
 - PI 537367 donor id: T-6. origin: United States. collector id: T-6. other id: W6 2634. group: W6. locality: Between Pollock and Fayette National Forest. received as: Pseudoroegneria spicata. Wild. Seed.
 - PI 537368 donor id: T-7. origin: United States. collector id: T-7. other id: W6 2635. group: W6. locality: 1.6km S of Pollock. received as: Pseudoroegneria spicata. Wild. Seed.

- PI 537369 donor id: T-8. origin: United States. collector id: T-8. other id: W6 2636. group: W6. locality: 1.6km N of Pollock. received as: Pseudoroegneria spicata. Wild. Seed.
- PI 537370 donor id: T-9. origin: United States. collector id: T-9. other id: W6 2637. group: W6. locality: S edge of Riggins. received as: Pseudoroegneria spicata. Wild. Seed.
- PI 537371 donor id: T-10. origin: United States. collector id: T-10. other id: W6 2638. group: W6. locality: 4.8km N of Riggins. received as: Pseudoroegneria spicata. Wild. Seed.
- PI 537372 donor id: T-13. origin: United States. collector id: T-13. other id: W6 2610. group: W6. locality: 38.4km NW of Clarkston. received as: Pseudoroegneria spicata. Wild. Seed.
- PI 537373 donor id: T-16. origin: United States. collector id: T-16. other id: W6 2639. group: W6. locality: Wawawai Rd., Whitman County. received as: Pseudoroegneria spicata. Wild. Seed.
- PI 537374 donor id: T-17. origin: United States. collector id: T-17. other id: W6 2640. group: W6. locality: 24km N of Colfax. received as: Pseudoroegneria spicata. Wild. Seed.
- PI 537375 donor id: T-22. origin: United States. collector id: T-22. other id: W6 2641. group: W6. locality: Between Lime and Durkee. received as: Pseudoroegneria spicata. Wild. Seed.
- PI 537376 donor id: T-28. origin: United States. collector id: T-28. other id: W6 2611. group: W6. locality: Hwy 233, 8km W Montello. received as: Pseudoroegneria spicata. Wild. Seed.
- PI 537377 donor id: T-32. origin: United States. collector id: T-32. other id: W6 2612. group: W6. locality: Hwy 225, 8km N Elko. received as: Pseudoroegneria spicata. Wild. Seed.
- PI 537378 donor id: T-36. origin: United States. collector id: T-36. other id: W6 2642. group: W6. locality: 8km W of Long Mountain. received as: Pseudoroegneria spicata. Wild. Seed.

PI 537364 to 537389-continued

- PI 537379 donor id: T-63. origin: United States. collector id: T-63. other id: W6 2613. group: W6. locality: Hwy ll, 8km S Adams. received as: Pseudoroegneria spicata. Wild. Seed.
- PI 537380 donor id: T-563. origin: United States. collector id: T-563. other id: W6 2614. group: W6. locality: Hwy 14, 12.8km E of Hood River, Oregon. received as: Pseudoroegneria spicata. Wild. Seed.
- PI 537381 donor id: T-564. origin: United States. collector id: T-564. other id: W6 2615. group: W6. locality: Hwy 14, 24km E of Hood River, Oregon. received as: Pseudoroegneria spicata. Wild. Seed.
- PI 537382 donor id: T-565. origin: United States. collector id: T-565. other id: W6 2616. group: W6. locality: Hwy 14, 12.8km W of Wishram. received as: Pseudoroegneria spicata. Wild. Seed.
- PI 537383 donor id: T-567. origin: United States. collector id: T-567. other id: W6 2617. group: W6. locality: Hwy 14, 1.6km E of Wishram. received as: Pseudoroegneria spicata. Wild. Seed.
- PI 537384 donor id: T-570. origin: United States. collector id: T-570. other id: W6 2618. group: W6. locality: Hwy 14, 19.2km W of Roosevelt. received as: Pseudoroegneria spicata. Wild. Seed.
- PI 537385 donor id: T-571. origin: United States. collector id: T-571. other id: W6 2619. group: W6. locality: Hwy 14, 4.8km E of Roosevelt. received as: Pseudoroegneria spicata. Wild. Seed.
- PI 537386 donor id: T-573. origin: United States. collector id: T-573. other id: W6 2620. group: W6. locality: Hwy 14, 20.8km E of Roosevelt. received as: Pseudoroegneria spicata. Wild. Seed.
- PI 537387 donor id: T-577. origin: United States. collector id: T-577. other id: W6 2621. group: W6. locality: Hwy 12, E of Walla Walla. received as: Pseudoroegneria spicata. Wild. Seed.
- PI 537388 donor id: T-578. origin: United States. collector id: T-578. other id: W6 2622. group: W6. locality: Hwy 12, 20.8km N of Dayton. received as: Pseudoroegneria spicata. Wild. Seed.

- PI 537364 to 537389-continued
 - PI 537389 donor id: T-579. origin: United States. collector id: T-579. other id: W6 2623. group: W6. locality: Hwy 12, 1.6km SE of Dodge. received as: Pseudoroegneria spicata. Wild. Seed.
- PI 537390 to 537391. Cucumis melo L. CUCURBITACEAE Melon

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Washington State University, 59 Johnson Hall, Pullman, Washington, United States. Received January 04, 1989.

- PI 537390 donor id: WKP-88-20. origin: Pakistan. collected:
 October 21, 1988. collector id: WKP-88-20. locality:
 Jomah Market, Islamabad, Punjab Province. remarks: Fruit oblong, 2-4kg in size. Rind thin, orange. Flesh sweet, greenish. Seed from one large fruit. Cultivated. Seed.
- PI 537391 donor id: WKP-88-29. origin: Pakistan. collected:
 October 21, 1988. collector id: WKP-88-29. locality:
 Holiday Inn, Islamabad, Punjab Province. remarks: Fruit
 oblong, 2-4kg in size. Rind thin, orange. Flesh sweet.
 Seed from one large fruit. Cultivated. Seed.
- PI 537392. Cucumis sp. CUCURBITACEAE

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Washington State University, 59 Johnson Hall, Pullman, Washington, United States. Received January 04, 1989.

donor id: WKP-88-35. origin: Pakistan. local name: Jibbut. collected: October 25, 1988. collector id: WKP-88-35. locality: Chickpea field, 34km to Jand on Rawalpindi-Jand Road, Punjab Province. remarks: Fruits small, less than 0.4kg in size. Seed from several fruits. Wild. Seed.

PI 537393. Andropogon gerardii Vitman POACEAE Big bluestem

Donated by: Barker, R.E., USDA-ARS, Northern Great Plains Res. Lab., P.O. 459, Mandan, North Dakota, United States. remarks: Released March, 1987. Received February 04, 1990.

origin: United States. cultivar: BONILLA. other id: CV-7. source: Crop Sci. 28(1):189 1988. group: CSR-BLUESTEM. remarks: Cultivar with high seed and forage yield, good winter survival and early maturity. Persistance good. Well adapted to the Northern Great Plains area where big bluestem is grown for range and pasture seeding, wild life habitat, nature area development, revegetation of surface mined land, erosion control structures and transportation corridors. Annual. Cultivar. Seed.

PI 537394. Hordeum vulgare L. POACEAE Barley

Donated by: South Dakota Agr. Exp. Sta., South Dakota, United States. Received February 04, 1990.

origin: USSR. cultivar: ODESSA. other id: CV-43.
source: Agron. J. 50(11):708 1958. group: CSR-BARLEY.
remarks: Six row cultivar with good malting quality.
Aleurone blue or colorless. Maturity and plant height medium. Straw weak. Tolerance to leaf rust (Puccinia recondita) and spot blotch (Helminthosporium sativa).
Introduced from Southern Russia to Canada prior to 1890. In 1902 the USDA obtained seed of Odessa. It was released in 1914 by the South Dakota Agricultural Experiment Station. Spring Annual. Cultivar. Seed.

PI 537395 to 537434. Sorghum bicolor (L.) Moench POACEAE Sorghum

Donated by: Miller, F.R., Texas Agr. Exp. Sta., Dept. of Soil and Crop Sciences, Texas A&M University, College Station, Texas, United States. remarks: Tx2818-Tx2857 Sorghum Germplasm. Received February 04, 1990.

PI 537395 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2818. pedigree: (((Tx378*Tx622)*Tx378)*Tx2792), 66-1-17-3-1. other id: 88C28901. other id: GP-272. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf B-line germplasm with 80% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.49 (1=best, 5=poor). Maturity medium. Plant height 80cm. Uniformity to top of panicle. Plant color purple. Seed red. Resistance to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.

- PI 537396 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2819. pedigree: (Tx430*Tx2816), 1-1-5-3-bulk. other id: 88C28902. other id: GP-273. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three dwarf R-line germplasm with 70-75% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.40 (1=best, 5=poor). Maturity medium late. Plant height 132cm. Uniformity to top of panicle. Plant color tan. Seed yellow with translucent endosperm. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537397 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2820. pedigree: (NSA954*Tx430), 3-2-5-3-1-1. other id: 88C25178. other id: GP-274. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 70-85% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.48 (1=best, 5=poor). Maturity medium late. Plant height 132cm. Uniformity to top of panicle. Plant color purple. Seed yellow with translucent endosperm. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537398 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2821. pedigree: ((SC120*Tx7000)*Tx7000), 10-4-6-2-1-3. other id: 88C28904. other id: GP-275. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 65-85% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.44 (1=best, 5=poor). Maturity medium. Plant height 127cm. Uniformity to top of panicle. Plant color tan. Seed white and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.

- PI 537399 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2822. pedigree: (Tx430*Tx2816), 1-1-5-3-bulk. other id: 89C25180. other id: GP-276. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 60-70% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.39 (1=best, 5=poor). Maturity medium late. Plant height 137cm. Uniformity to top of panicle. Plant color tan. Seed yellow with translucent endosperm. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537400 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2823. pedigree: (Tx430*Tx2816), 1-1-5-3-1. other id: 89C25181. other id: GP-277. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 70-75% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.38 (1=best, 5=poor). Maturity medium. Plant height 137cm. Uniformity to top of panicle. Plant color tan. Seed yellow with translucent endosperm. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537401 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2824. pedigree: (((Tx378*Tx622)*Tx378)*Tx2792), 66-1-17-1-1. other id: 88C28907. other id: GP-278. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf B-line germplasm with 80-85% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.54 (1=best, 5=poor). Maturity medium. Plant height 142cm. Uniformity to top of pnicle. Plant color purple. Seed red. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.

- PI 537402 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2825. pedigree: ((SC120*Tx7000)*Tx7000), 10-4-6-2-2-2-2. other id: 88C28908. other id: GP-279. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 75-80% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.50 (1=best, 5=poor). Maturity medium. Plant height 132cm. Uniformity to top of panicle. Plant color tan. Seed white and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537403 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2826. pedigree: ((SC120*Tx7000)*Tx7000), 10-4-6-1-1-1. other id: 88C28909. other id: GP-280. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 75-85% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.42 (1=best, 5=poor). Maturity medium. Plant height 140cm. Uniformity to top of panicle. Plant color tan. Seed white and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537404 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2827. pedigree: ((SC120*Tx7000)*Tx7000), 10-4-6-2-1-2. other id: 88C28910. other id: GP-281. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 72-75% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.46 (l=best, 5=poor). Maturity medium. Plant height 137cm. Uniformity to top of panicle. Plant color tan. Seed white and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.

- PI 537405 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2828. pedigree: (Tx430*Tx2816), 1-1-5-3-bulk. other id: 88C28911. other id: GP-282. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 60-75% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.47 (1=best, 5=poor). Maturity medium. Plant height 137cm. Uniformity to top of panicle. Plant color tan. Seed yellow with translucent endosperm. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537406 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757.
 cultivar: Tx2829. pedigree: (Tx430*Tx2816), 1-1-5-1-1.
 other id: 88C28912. other id: GP-283. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks:
 Three-dwarf R-line germplasm with 60-75% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.53 (1=best, 5=poor). Maturity medium. Plant height 132cm. Uniformity to top of panicle. Plant color tan. Seed yellow with translucent endosperm. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537407 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2830. pedigree: ((Tx378*SC110-9)*Tx615), 4-3-5-2-1-2-bulk. other id: 88C28913. other id: GP-284. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf B-line germplasm with 70-75% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.47 (1=best, 5=poor). Maturity medium early. Plant height 152cm. Uniformity to top of panicle. Plant color tan. Seed white. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.

- PI 537408 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2831. pedigree: ((Tx399*White Kafir)*Tx2792), 66-1-1-4-1. other id: 88C28914. other id: GP-285. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf B-line germplasm with 80-85% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.56 (1=best, 5=poor). Maturity medium early. Plant height 140cm. Uniformity to top of panicle. Plant color purple. Seed red. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537409 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2832. pedigree: ((SC120*Tx7000)*Tx7000), 10-4-6-2-3-4. other id: 88C28915. other id: GP-286. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 70-80% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.45 (l=best, 5=poor). Maturity medium early. Plant height 137cm. Uniformity to top of panicle. Plant color tan. Seed white and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537410 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757.
 cultivar: Tx2833. pedigree:
 (((SC120*Tx7000)*Tx7000)*Tx430), 1-1-3-bulk. other id:
 88C28916. other id: GP-287. source: Crop Sci.
 30(5):1168 1990. group: CSR-SORGHUM. remarks:
 Three-dwarf R-line germplasm with 75-80% green leaf color retention at maturity and resistance to insecticide burn.
 Combining ability good. Desirability mean 1.54 (l=best, 5=poor). Maturity medium. Plant height 132cm. Uniformity to top of panicle. Plant color tan. Seed white and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.

- PI 537411 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2834. pedigree: (((Tx378*Tx622)*Tx378)*Tx2792), 66-1-20-3-1. other id: 88C28917. other id: GP-288. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf B-line germplasm with 75-80% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.55 (1=best, 5=poor). Maturity medium early. Plant height 137cm. Uniformity to top of panicle. Plant color purple. Seed red. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537412 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2835. pedigree: ((Tx2816*SC326-6)*Tx430), 3-1-1-6-3. other id: 88C28918. other id: GP-289. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 70% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.52 (1=best, 5=poor). Maturity medium early.Plant height 135cm. Uniformity to top of panicle. Plant color tan.Seed white and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537413 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2836. pedigree: (Tx430*Tx2816), 1-1-5-3-3. other id: 88C28919. other id: GP-290. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 70% green color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.47 (1=best, 5=poor). Maturity medium. Plant height 140cm. Uniformity to top of panicle. Plant color yellow with translucent endosperm. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.

- PI 537414 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2837. pedigree: ((Tx430*SC326-6)*Tx430), 1-1-2-2-2. other id: 88C28920. other id: GP-291. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 70-72% green leaf leaf retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.54 (1=best, 5=poor). Maturity medium late. Plant height 137cm. Uniformity to top of panicle. Plant color purple. Seed cream color and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537415 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2838. pedigree: (Tx430*Tx2816), 1-1-5-3-1. other id: 89C25196. other id: GP-292. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 70-75% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.45 (1=best, 5=poor). Maturity medium. Plant height 140cm. Uniformity to top of panicle. Plant color tan. Seed yellow with translucent endosperm. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537416 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2839. pedigree: (SC130-12*Tx2536), 4-1-2-2-5. other id: 88C28922. other id: GP-293. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 60-65% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.58 (1=best, 5=poor). Maturity medium. Plant height 135cm. Uniformity to top of panicle. Plant color red. Seed white and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.

- PI 537417 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757.
 cultivar: Tx2840. pedigree: (Tx430*SC326-6), 3-2-5-4-3.
 other id: 88C28923. other id: GP-294. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks:
 Three-dwarf R-line germplasm with 60-70% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.61 (1=best, 5=poor). Maturity medium late. Plant height 140cm.
 Uniformity to top of panicle. Plant color purple. Seed white and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537418 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2841. pedigree: ((SC120*Tx7000)Tx430), 10-2-3-3. other id: 88C28924. other id: GP-295. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 50-80% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.55 (l=best, 5=poor). Maturity medium early. Plant height 127cm. Uniformity to top of panicle. Plant color tan. Seed white and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537419 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2842. pedigree: ((SC120*Tx7000)*Tx7000), 10-4-6-2-1-1. other id: 88C28925. other id: GP-296. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 60-80% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.56 (1=best, 5=poor). Maturity medium. Plant height 127cm. Uniformity to top of panicle. Plant color tan. Seed white and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.

- PI 537420 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2843. pedigree: ((SC120*Tx7000)*Tx7000), 10-4-6-2-3-2. other id: 88C28926. other id: GP-297. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 60-82% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.62 (1=best, 5=poor). Maturity medium late. Plant height 137cm. Uniformity to top of panicle. Plant color tan. Seed white and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537421 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2844. pedigree: (77CS5*Tx2817), 3-1-5-5-3. other id: 88C28927. other id: GP-298. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 70-85% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.59 (1=best, 5=poor). Maturity medium early. Plant height 127cm. Uniformity to top of panicle. Plant color red. Seed white and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537422 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2845. pedigree: (((SC120*Tx7000)*Tx7000)*Tx430), 1-1-3-bulk. other id: 88C28928. other id: GP-299. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 70-82% green leaf color retention at maturity and resistance to insecticide burn. Combing ability good. Desirability mean 1.58 (1=best, 5=poor). Maturity medium. Plant height 112cm. Uniformity to top of panicle. Plant color tan. Seed cream color and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.

- PI 537423 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2846. pedigree: ((SC120*Tx7000)*Tx7000), 10-4-6-2-2-2-2. other id: 88C28929. other id: GP-300. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: 3-dwarf R-line germplasm with 75-85% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.47 (1=best, 5=poor). Maturity medium. Plant height 127cm. Uniformity to top of panicle. Plant color tan. Seed white and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537424 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2847. pedigree: ((Tx2816*SC326-6)*Tx430), 3-1-1-5-1. other id: 88L30. other id: GP-301. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 70% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.53 (1=best, 5=poor). Maturity medium. Plant height 122cm. Uniformity to top of panicle. Plant color purple. Seed white. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537425 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2848. pedigree: ((Tx2816*SC326-6)*Tx430), 2-1-6-4-3. other id: 88C28931. other id: GP-302. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 80-85% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.61 (1=best, 5=poor). Maturity very late. Plant height 122cm. Uniformity to top of panicle. Plant color red. Seed cream color and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.

- PI 537426 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2849. pedigree: (Tx430*77CS3), 1-47-2-2-2-1. other id: 88C28932. other id: GP-303. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 60-90% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.63 (1=best, 5=poor). Maturity medium. Plant height 112cm. Uniformity to top of panicle. Plant color tan. Seed yellow with translucent endosperm. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537427 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2850. pedigree: ((SC120*Tx7000)*Tx430), 10-2-7-3. other id: 88C28933. other id: GP-304. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 60-75% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.60 (l=best, 5=poor). Maturity medium. Plant height 114cm. Uniformity to top of panicle. Plant color tan. Seed white and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537428 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2851. pedigree: (Tx430*Tx2816), 1-1-5-3-bulk. other id: 88C28934. other id: GP-305. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 60-70% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.53 (1=best, 5=poor). Maturity medium. Plant height 132cm. Uniformity to top of panicle. Plant color tan. Seed yellow with translucent endosperm. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.

- PI 537429 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2852. pedigree: (Tx430*SC326-6), 2-1-7-7-2. other id: 89C25210. other id: GP-306. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 75-80% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.64 (1=best, 5=poor). Maturity very late. Plant height 127cm. Uniformity to top of panicle. Plant color purple. Seed white and translucent. Resistance to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537430 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2853. pedigree: ((SC120*Tx7000)*Tx430), 4-1-2-2-bulk. other id: 88C28936. other id: GP-307. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 60-70% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.68 (l=best, 5=poor). Maturity medium early. Plant height 122cm. Uniformity to top of panicle. Plant color red. Seed red and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537431 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2854. pedigree: ((SC120*Tx7000)*Tx430), 10-2-7-3. other id: 88C28937. other id: GP-308. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 70-80% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.58 (l=best, 5=poor). Maturity medium early. Plant height 112cm. Uniformity to top of panicle. Plant color tan. Seed white and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.

- PI 537432 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2855. pedigree: ((Tx2816*SC326-6)*Tx430), 3-1-1-5-1. other id: 89C25213. other id: GP-309. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 65-70% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.50 (1=best, 5=poor). Maturity late. Plant height 127cm. Uniformity to top of panicle. Plant color purple. Seed white. Resistance to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537433 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2856. pedigree: ((Tx2816*SC326-6)*Tx430), 2-1-6-3-3. other id: 88C28939. other id: GP-310. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 75-80% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.60 (l=best, 5=poor). Maturity late. Plant height 127cm. Uniformity to top of panicle. Plant color red. Seed white and translucent. Resistant to anthracnose (Colletotrichum graminicola). Annual. Breeding Material. Seed.
- PI 537434 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2857. pedigree: ((AF28*Tx2536)*Tx430), 1-1-1-1-2. other id: 88C28940. other id: GP-311. source: Crop Sci. 30(5):1168 1990. group: CSR-SORGHUM. remarks: Three-dwarf R-line germplasm with 80-85% green leaf color retention at maturity and resistance to insecticide burn. Combining ability good. Desirability mean 1.52 (1=best, 5=poor). Maturity medium early. Plant height 132cm. Uniformity to top of panicle. Plant color red. Seed cream color and translucent. Resistant to anthracnose (Colletotrichium graminicola). Annual. Breeding Material. Seed.

PI 537435. Poa pratensis L. POACEAE Bluegrass

Donated by: Meyer, W.A., Pure-Seed Testing, Inc., P.O. Box 449, Hubbard, Oregon, United States; and Warren's Turf Nursery; and New Jersey Agr. Exp. Sta.. remarks: Able I Kentucky Bluegrass. Received February 04, 1990.

PI 537435-continued

origin: United States. cultivar: ABLE I. pedigree: Warren's A-25/Nugget, Sel 69-2186-3. other id: N1315. other id: CV-40. source: Crop Sci. 30(5):1155 1990. group: CSR-BLUEGRASS. other id: PVP 8500113. source: Certificate in force. group: PVPO. remarks: Turf-type with outstanding cold-tolerance and good resistance to leaf spot and melting-out (Drechslera poae), leaf rust (Puccinia brachypodii var. poae-nemoralis), many races of powdery mildew (Erysiphe graminis) and stripe smut (Ustilago striiformis). Seedling vigor, mowing qualities and performance in shade trials good. Plants leafy, compact with high density and medium-fine texture. Perennial. Cultivar. Seed.

PI 537436. Avena sativa L. POACEAE Common oat

Donated by: Wesenberg, D.M., USDA-ARS, Aberdeen Research and Extention Center, P.O. Box 307, Aberdeen, Idaho, United States. Received February 04, 1990.

origin: United States. cultivar: 82AB1142. pedigree: 74AB1952/74AB2608, F5 Selection. remarks: Short straw cultivar with very good lodging and shattering resistance. Maturity mid-season. Yield test weight, groat content, and commercial milling qualities satisfactory. Plant height 74cm. Panicle type equilateral. Kernels white with slight yellow cast. Adapted for irrigated environments in western U.S. Spring Annual. Cultivar. Seed.

PI 537437 to 537438. Hordeum vulgare L. POACEAE Barley

Donated by: Wesenberg, D.M., USDA-ARS, Aberdeen Research and Extention Center, P.O. Box 307, Aberdeen, Idaho, United States. remarks: Release in 1990. Received February 04, 1990.

PI 537437 origin: United States. cultivar: EIGHT-TWELVE.

pedigree: 72AB83/Winter Malt, F5 Selection. remarks: Six

row feed barley with very good lodging resistance, good

winter survival and early maturity. Plant height 76cm.

Test weight 650kg per cubic meter. Yield 9014kg per

hectare. Adapted for irrigated environments in Idaho.

Susceptible Fusarium snow mold. Winter Annual.

Cultivar. Seed.

PI 537437 to 537438-continued

PI 537438 origin: United States. cultivar: TARGHEE. pedigree: 60AB1810-53/Hector, F5 Selection. remarks: Two-row feed barley with improved lodging resistance for use in short season and nonirrigated environments. Plant height 58cm. Test weight 669kg per cubic meter. Yield 3118kg per hectare. Spring Annual. Cultivar. Seed.

PI 537439. Poa trivialis L. POACEAE Bluegrass

Donated by: Hurley, R.H., Lofts Seed Inc., P.O. Box 146, Bound Brook, New Jersey, United States; and New Jersey Agr. Exp. Sta.. remarks: Laser Rough Bluegrass Released in 1988. Received February 04, 1990.

origin: United States. origin institute: Lofts Seed Company, P.O. Box 146, Bound Brook, New Jersey. cultivar: LASER. pedigree: Plants selected from old turfs in New Jersey, Pennsylvania, New York and California followed by clonal evaluation and 5 cycles of recurrent restricted phenotypic selection. other id: PVP 8900288. source: Pending. group: PVPO. other id: CV-42. source: Crop Sci. 30(6):1357 1990. group: CSR-BLUEGRASS. remarks: Perennial turf-type with leafy, moderately low-growing, compact, fine-textured, and medium-high density character. Vertical growth rate slow. Plants dark green. Germination rapid, even under cool conditions. Seedling vigor good. Winterhardiness and tolerance to cool shade and wet soils excellent. Useful for winter overseeding of dormant warm season turfs in Southern U.S. Perennial. Cultivar. Seed.

PI 537440. Medicago sativa L. FABACEAE Alfalfa

Donated by: Bingham, E.T., Wisconsin Agr. Exp. Sta., University of Wisconsin, Madison, Wisconsin, United States. remarks: Regen-SY Alfalfa Germplasm. Received February 04, 1990.

origin: United States. origin institute: Wisconsin Agr. Exp. Sta., University of Wisconsin, Madison, Wisconsin 53706. cultivar: REGEN-SY. pedigree: RAS1/RYS1. other id: GP-242. group: CSR-ALFALFA. remarks: Hybrid with improved regeneration for tissue culture and transformation research, 95-100% hybrid plants regenerate using Wisconsin protocol. Annual. Breeding Material. Seed.

PI 537441. Medicago sativa L. FABACEAE Alfalfa

Donated by: Thompson, T.E., Purdue University Agricultural Exp. Sta., Dept. of Agronomy, Purdue University, West Lafayette, Indiana, United States. remarks: Released in June, 1973. Received February 04, 1990.

origin: United States. cultivar: INDIANA SYN.C.
pedigree: 6-clone synthetic from germplasm from 2 clones
each MSA-W4, MSB-W4, and one each from SYN. AA(866) and
63-125. other id: GP-43. source: Crop Science 14(4)
609, 1974. group: CSR-ALFALFA. remarks: Germplasm with
high combining ability for resistance to leaf yellowing
caused by potato leaf hopper (Empoasca fabae). Moderately
resistant to Phytophthora root rot and bacterial wilt.
Annual. Breeding Material. Seed.

PI 537442. Hordeum vulgare L. POACEAE Barley

Donated by: Idaho Agr. Exp. Sta., Aberdeen, Idaho, United States. remarks: Released in 1918. Received.

origin: United States. origin institute: Idaho Agr. Exp. Sta., Idaho. cultivar: TREBI. pedigree: Single plant selection from PI 15821. other id: CV-66. source: Crop Sci. 5(2):196 1965.. group: CSR-BARLEY. remarks: Six row type. Maturity midseason. Awns rough. Aleurone blue. Kernels large. Growth vigorous. Yield high. Straw weak. Performance as malting variety unfavorable. Good resistance to several races of loose smut. Spring Annual. Cultivar. Seed.

PI 537443. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: Peterson, R.J., R.J Peterson Enterprises Inc., Suite 410, Colonial Office Plaza, 1049 S.W. Baseline, Hillsboro, Oregon, United States. remarks: Released in August, 1990. Received February 04, 1990.

PI 537443-continued

origin: United States. cultivar: SHENANDOAH. pedigree: Advanced generation synthetic cultivar selected from progenies of clones selected from old lawns, pastures and similar turfs, U.S. Plant Introduction Program, and trispecies hybrids from the U.S. Regional Pasture Lab. other id: PE-7. other id: PVP 9000037. source: Pending. group: PVPO. remarks: Cultivar with improved stress tolerance and resistance to net blotch (Drechslera dictyoides f. sp. dictyoides). Plants low growing, persistant with mid-wide leaves and moderately dark green color. Performs well under varying light intensities. Seedling vigor good. Adapted to wide range of soils. Little or no objectionable thatch. Annual. Cultivar. Seed.

PI 537444. Festuca rubra L. POACEAE Red fescue

Donated by: Meyer, W.A., Pure-Seed Testing, P.O. 449, Hubbard, Oregon, United States; and Pennington Seed Inc., ,; and New Jersey Agr. Exp. Sta.. remarks: Flyer Strong Creeping Red Fescue. Received February 04, 1990.

origin: United States. cultivar: FLYER. pedigree:
Advanced generation synthetic cultivar from progenies of clones selected from old turfs in Northwestern U.S.,
Kentucky, Tennessee and Texas. other id: Pure-Seed 4GO.
other id: CV-39. source: Crop Sci. 30(5):1156 1990.
group: CSR-FESCUE. other id: PVP 8600077. source:
Certificate in force. group: PVPO. remarks: Strong
creeping turf-type, medium low-growing with fine texture,
medium density and dark green color. Seedling vigor and
spreading good. Reproductive maturity medium early. Seed
yield high. Resistant to net blotch (Drechslera
dictyoides), powdery mildew (Erysiphe graminis) and rust
(Puccinia crandallii). Good cover under moderate shade
and tree root competition. Annual. Cultivar. Seed.

PI 537445. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: Meyer, W.A., Pure-Seed Testing, Inc., 3057 G. Street, Hubbard, Oregon, United States; and Turf Seed Inc.. remarks: Bonanza Tall Fescue. Received February 04, 1990.

PI 537445-continued

origin: United States. cultivar: BONANZA. pedigree:
Advanced generation synthetic cultivar from 2 cycles of
recurrent selection of progenies from 3 clnones selected
fro from turf areas in Georgia and New Jersey. other id:
5L4. other id: CV-40. source: Crop Sci. 30(5):1157
1990. group: CSR-FESCUE. other id: PVP 8500100.
source: Certificate in force. group: PVPO. Annual.
Cultivar. Seed.

PI 537446. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: Funk, C.R., New Jersey Agricultural Exp. Sta., Soils and Crops Department, Cook College, Rutgers University, New Brunswick, New Jersey, United States. remarks: Released by Turf Seed in August, 1989. Received February 04, 1990.

origin: United States. cultivar: PHOENIX. pedigree:
Advanced generation synthetic cultivar from progenies of
3 clones of Rebel, PI 297903, and 22 clones selected from
old lawn-type turfs. other id: NORMAC 77. other id: PVP
9000242. source: Pending. group: PVPO. remarks:
Turf-type, persistent, attractive, and moderately
low-growing. Density and leaf texture medium. Heat and
drought tolerance and winterhardiness good. Seedling
vigor and wear tolerance good. Reproductive maturity
medium early. moderate resistance to net blotch
(Drechslera dictyoides f. sp. dictyoides) and large brown
patch (Rhizoctonia solani). Thatch production low.
Annual. Cultivar. Seed.

PI 537447. Nicotiana tabacum L. SOLANACEAE Tobacco

Donated by: Gwynn, G.R., Agricultural Research Service -- USDA, Crops Research Lab., Oxford, North Carolina, United States; and North Carolina Agr. Exp. Sta.; and Georgia Agr. Exp. Sta.. remarks: I-514 Tobacco Germplasm. Received February 04, 1990.

origin: United States. cultivar: I-514. pedigree: Tobacco Introduction 165/North Carolina. other id: GP-42. source: Crop Sci. 30(6):1371 1990. group: CSR-TOBACCO. Annual. Breeding Material. Seed.

PI 537448 to 537449. Arachis hypogaea var. vulgaris Harz FABACEAE Peanut

Donated by: Norden, A.J., Florida Agr. Exp. Sta., Department of Agronomy, University of Florida, Gainsville, Florida, United States. remarks: Released in June, 1989. Received February 04, 1990.

PI 537448 to 537449-continued

- PI 537448 origin: United States. cultivar: 435-1. pedigree:
 Florispan derivative with possible Spanish outcross.
 other id: NSL 247175. group: NSSL. remarks: Germplasm with 80% oleic acid, 2% linoleic acid, and iodine value of 74. Annual. Breeding Material. Seed.
- PI 537449 origin: United States. cultivar: 435-2. pedigree:
 Florispan derivative with possible Spanish outcross.
 other id: NSL 247176. group: NSSL. remarks: Germplasm with 80% oleic acid, 2% linoleic acid, and iodine value of 74. Annual. Breeding Material. Seed.
- PI 537450. Trifolium vesiculosum Savi FABACEAE Clover

Donated by: Miller, J.D., Agricultural Research Service -- USDA, Tifton, Georgia, United States; and Georgia Agr. Exp. Sta.. remarks: Tifclo-l Arrowleaf Clover Germplasm. Received February 04, 1990.

origin: United States. origin institute: Agricultural Research Service -- USDA, Tifton, Georgia 31793. cultivar: TIFCLO-1. pedigree: Recurrent restricted phenotypic selection using Amclo, Meechee and Yuchi. other id: GP-89. source: Crop Sci. 30(5):1168 1990. group: CSR-OTHER LEGUMES. remarks: Germplasm with semi erect to erect growth habit, medium early and produces a relative forage yeld or 110% compared to Amclo 98%, Meechee 105%, and Yuchi 100%, 4 year average yield at Tifton 8336kg per hectare. Seed yields good with adequate pollination. Disease resistance similar to other released varieties. Annual. Breeding Material. Seed.

PI 537451. Dactylis glomerata L. POACEAE Orchardgrass

Donated by: Berg, C.C., Agricultural Research Service -- USDA, U.S. Regional Pasture Lab., Curtin Road, University Park, Pennsylvania, United States. remarks: PL-OGDR1 Orchardgrass Germplasm. Received February 04, 1990.

origin: United States. cultivar: PL-OGDR1. pedigree:
Recurrent phenotypic selection using 28 North American
and European cultivars. other id: GP-1. source: Crop
Sci. 30(5):1164 1990. group: CSR-ORCHARDGRASS.
remarks: Germplasm with resistance to purple leaf spot
(Stagonospora arenaria). Considerable variability for
maturity, plant height, and other agronomic traits. Leaf
spot resistance did not effect yield or quality traits.
Perennial. Breeding Material. Seed.

PI 537452. Lolium perenne L. POACEAE Perennial ryegrass

Donated by: Meyer, W.A., Pure-Seed Testing, Inc., 3057 G. Street, Hubbard, Oregon, United States; and Turf Seed, Inc.. remarks: Birdie II Perennial Ryegrass. Received February 04, 1990.

origin: United States. cultivar: BIRDIE II. pedigree:
Advanced generation synthetic cultivar using stem rust
(Puccinia graminis) resistant germplasm from old turf
areas in Washington, D.C. and St Louis, MO. in 5 cycles
of phenotypic recurrent selection. other id: CV-133.
source: Crop Sci. 30(5):1158 1990. group: CSR-OTHER
GRASSES. other id: PVP 8300167. source: Certificate in
force. group: PVPO. remarks: Cultivar with early
maturity, high seedling vigor and resistance to red
thread (Laetisaria fuciformis), and brown patch
(Rhizoctonia solani), net blotch (Drechslera dictyoides
f. sp. perenne), stem rust (Puccinia graminis), and crown
rust (Puccinia coronata corda). Adapted for a wide range
of soils and climates. Suitable for lawns, parks, golf
course tees, fairways and cart paths, and athletic
fields. Perennial. Cultivar. Seed.

PI 537453. Lolium perenne L. POACEAE Perennial ryegrass

Donated by: Peterson, R.J., Peterson Enterprises, Inc., Suite 410, Colonial Office Plaza, 1049 S.W. Baseline, Hillsboro, Oregon, United States; and New Jersey Agr. Exp. Sta.; and Williamette Seed Company. remarks: Seville Perennial Ryegrass. Received February 04, 1990.

origin: United States. origin institute: R.J. Peterson Enterprises, Inc., Suite 410, Colonial Office Plaza, 1049 S.W. Baseline, Hillsboro, Oregon 97123. cultivar: SEVILLE. pedigree: Advanced generation synthetic cultivar selected from 14 clones from old turfs in Maryland, New Jersey, New York, and Pennsylvania. other id: PVP 9000038. source: Pending. group: PVPO. other id: CV-139. group: CSR-OTHER GRASSES. remarks: Turf-type, persistant, medium high density, and medium fine leaf texture. Plants dark green. Moderate reduction in vertical growth rate. Summer stress tolerance, winterhardiness, and tolerance to medium close mowing good. Wear tolerance excellent. Reproductive maturity medium early. Yield of quality seed high. Resistance to net blotch disease and large brown patch. Produces limited thatch. Perennial. Cultivar. Seed.

PI 537454. Abelmoschus esculentus (L.) Moench MALVACEAE Okra Received

PI 537454-continued

origin: UNKNOWN. remarks: Highly resistant to fusarium. Seed.

PI 537455. Sorghum bicolor (L.) Moench POACEAE Sorghum

Donated by: Andrews, D.J., University of Nebraska, Department of Agronomy, Lincoln, Nebraska, United States; and Agricultural Research Service -- USDA. remarks: N122 A and B Grain Sorghum Lines. Received February 04, 1990.

origin: United States. cultivar: N122. pedigree:
Diploid derived from tetraploid bulk population in
AKS4(Al milo male sterile cytoplasm). other id: PL-207.
source: Crop Sci. 30(6):1379 1990. group: CSR-SORGHUM.
remarks: Parental line with excellent agronomic
characteristics for use directly as a female parent or in
hybrid combination as germplasm in breeding programs.
Plant height 85cm. Days to flowering 72. Plants purple
with dry midribs and semi-open panicles. Seeds white with
no pigminted testa. Annual. Genetic Material. Seed.

PI 537456 to 537457. Sorghum bicolor (L.) Moench POACEAE Sorghum

Donated by: Andrews, D.J., University of Nebraska, Department of Agronomy, Lincoln, Nebraska, United States. remarks: Released June, 1989. Received February 04, 1990.

- PI 537456 origin: United States. cultivar: N123. pedigree:
 Selection from NB6B in MA4 (Al milo male sterile
 cytoplasm). remarks: Germplasm with good combining
 ability and moderate lodging resistance. Plant height
 80cm. Grain maturity 95 days. Seed white and vitreous.
 Seed weight average 2.3gm per 100. Spring Annual.
 Breeding Material. Seed.
- PI 537457 origin: United States. cultivar: N124. pedigree:
 Selection from NB6B in MA4 (Al milo male sterile
 cytoplasm). remarks: Germplasm with good combining
 ability and moderate lodging resistance. Plant height
 80cm. Grain maturity 92 days. Seed white and vitreous.
 Seed weight average 2.3gm per 100. Spring Annual.
 Breeding Material. Seed.
- PI 537458 to 537459. Sorghum bicolor (L.) Moench POACEAE Sorghum

Donated by: Eastin, J.D., University of Nebraska, Department of Agronomy, Lincoln, Nebraska, United States. remarks: Released April 13, 1989. Received February 04, 1990.

- PI 537458 origin: United States. cultivar: N125. pedigree:
 ICRISAT population/KHB. remarks: Germplasm with early
 maturity. Plants short. Seed white and low to medium in
 number. Annual. Breeding Material. Seed.
- PI 537459 origin: United States. cultivar: N126. pedigree:
 ICRISAT population/KHB. remarks: Germplasm with early
 maturity. Plants short. Seed white and medium to low in
 number. Annual. Breeding Material. Plant.
- PI 537460 to 537473. Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE Watermelon

Donated by: Nuez, F., Escuela Tecnica Sup. de Ing. Agronomos, Catedra de Genetica, Univ. Politecnica, Camino de Vera S/N, 46022 - Valencia, Spain. remarks: Received through IBPGR, Rome, Italy. Received August 18, 1987.

- PI 537460 donor id: CA-CI-1. origin: Spain. local name: Sandia moseatel. collected: April 18, 1987. locality: Teguise, Lauzarote Province. latitude: 29 deg. 08 min. N. longitude: 13 deg. 35 min. W. elevation: 360m. remarks: Sown November, harvested April-May. Fruit elongated, sweet, black. Cultivated. Seed.
- PI 537461 donor id: CA-CI-2. origin: Spain. local name: Sandia melade. collected: April 18, 1987. locality: Teguise, Lauzarote Province. latitude: 29 deg. 08 min. N. longitude: 13 deg. 35 min. W. elevation: 360m. remarks: Fruit round, black. Cultivated. Seed.
- PI 537462 donor id: CA-CI-3. origin: Spain. local name: Sandia melade. collected: April 18, 1987. locality: Teguise, Lauzarote Province. latitude: 29 deg. 08 min. N. longitude: 13 deg. 35 min. W. elevation: 360m. remarks: Fruit large, round. Cultivated. Seed.
- PI 537463 donor id: CA-CI-4. origin: Spain. local name: Sandia melade. collected: April 18, 1987. locality: Muulquee, Teguise, Lauzarote Province. latitude: 29 deg. 08 min. N. longitude: 13 deg. 35 min. W. elevation: 360m. remarks: Fruit large, round. Cultivated. Seed.
- PI 537464 donor id: CA-CI-5. origin: Spain. local name: Sandia moseatel. collected: April 18, 1987. locality: El Table, Teguise, Las Palmas Province. latitude: 28 deg. 06 min. N. longitude: 13 deg. 37 min. W. remarks: Fruit large to 25kg, even and oval. Cultivated. Seed.

- PI 537465 donor id: CA-CI-6. origin: Spain. local name: Sandia melada. collected: April 18, 1987. locality: Femel, Las Palmas Province. latitude: 28 deg. 52 min. N. longitude: 13 deg. 50 min. W. remarks: Fruit large, round. Mixed collection. Cultivated. Seed.
- PI 537466 donor id: CA-CI-7. origin: Spain. local name: Sandia melada. collected: April 18, 1987. locality: Tias, Las Palmas Province. latitude: 28 deg. 50 min. N. longitude: 13 deg. 45 min. W. Cultivated. Seed.
- PI 537467 donor id: CA-CI-8. origin: Spain. local name: Sandia de la Peuiunila. collected: April 18, 1987. locality:
 Tias, Las Palmas Province. latitude: 28 deg. 50 min. N. longitude: 13 deg. 45 min. W. Cultivated. Seed.
- PI 537468 donor id: C-CI-7. origin: Spain. local name: Sindria. collected: February 12, 1985. locality: Farmstore, plain level, loam, Perelada, Gerona Province. latitude: 42 deg. 19 min. N. longitude: 03 deg. W. elevation: 2m. remarks: Sown May, harvested August. Cultivated. Seed.
- PI 537469 donor id: CM-CI-9. origin: Spain. local name: Sandia. collected: February 18, 1985. locality: Undulating, level site, clay-silt farmland, Villatoya, Albacete Province. latitude: 39 deg. 20 min. N. longitude: 04 deg. 22 min. W. elevation: 450m. remarks: Sown April, harvested August. Used for fresh market. Landrace. Seed.
- PI 537470 donor id: CM-CI-10. origin: Spain. local name: Sandia. collected: February 18, 1985. locality: Undulating, silt farmland, Filauco, Albacete Province. latitude: 39 deg. 19 min. N. longitude: 01 deg. 23 min. W. elevation: 620m. remarks: Sown April, harvested August-September. Used for fresh market. Landrace. Seed.
- PI 537471 donor id: MU-CI-1. origin: Spain. local name: Sandia cartagenera. collected: September 22, 1984. locality: Plain level, clay, farmstore, 1.6km N of Totana, Murcia Province. latitude: 37 deg. 53 min. N. longitude: 01 deg. 23 min. W. elevation: 145m. remarks: Sown April, harvested August-September. Sweet type. Landrace. Seed.
- PI 537472 donor id: V-CI-32. origin: Spain. local name: Sandia verde. collected: October 06, 1984. locality: Plain level, sandy clay, farmstore, 1.2km N of Rafal, Alicante Province. latitude: 38 deg. 05 min. N. longitude: 00 deg. 52 min. W. elevation: 18m. remarks: Sown March-April, harvested July-August. Used for desert. Oidium disease present. Landrace. Seed.

- PI 537473 donor id: V-CI-33. origin: Spain. local name: Sandia Alicante. collected: October 06, 1984. locality: Plain level, clay, farmstore, Ocevillente, Alicante Province. latitude: 38 deg. 15 min. N. longitude: 00 deg. 51 min. W. elevation: 36m. remarks: Sown March-April, harvested July-September. Used for desert. Odium and fusarium disease present. Landrace. Seed.
- PI 537474 to 537475. Cucurbita moschata (Duch.) Duch. ex Poir. CUCURBITACEAE Squash

Donated by: Nuez, F., Escuela Tecnica Sup. de Ing. Agronomos, Catedra de Genetica, Univers. Politecnica Camino de Vera S/N, 46022 - Valencia, Spain. remarks: Received through IBPGR, Rome, Italy. Received August 18, 1987.

- PI 537474 donor id: MU-CU-5. origin: Spain. local name: Totanera. collected: September 15, 1984. locality: Plain level, level site, brown clay-silt soil, low stoniness, moderate-good drainage, farmland, Torreagueza, Murcia Province. latitude: 37 deg. 59 min. N. longitude: 001 deg. 40 min. W. elevation: 60m. remarks: Sown March-April, harvested September-October. Used as food (stew). Landrace. Seed.
- PI 537475 donor id: V-CU-141. origin: Spain. local name: Cabello de Angel. collected: October 04, 1984. locality: Plain level, level site, brown and orange silt soil, low stoniness, good drainage, farmland, 2km W of Dolores, Alicante Province. latitude: 38 deg. 08 min. N. longitude: 000 deg. 48 min. W. elevation: 18m. remarks: Sown April-May, harvested October-November. Sweet type. Associated crops tomato, pepper, and eggplant. Landrace. Seed.
- PI 537476 to 537565. Cucurbita sp. CUCURBITACEAE

Donated by: Nuez, F., Escuela Tecnica Sup. de Ing. Agronomos, Catedra de Genetica, Univers. Politecnica Camino de Vera S/N, 46022 - Valencia, Spain. remarks: Received through IBPGR, Rome, Italy. Received August 18, 1987.

PI 537476 donor id: A-CU-20. origin: Spain. collected: April 26, 1985. locality: Arcos de las Salivas, Tervel Province. latitude: 40 deg. 00 min. N. longitude: 001 deg. 04 min. W. elevation: 1081m. Cultivated. Seed.

- PI 537477 donor id: AN-CU-54. origin: Spain. local name: Mangote. collected: November 19, 1984. locality: Undulating, slope site, brown sand-silt soil, medium stoniness, good drainage, farmstore, Alcavdete, Jaen Province. latitude: 37 deg. 35 min. N. longitude: 004 deg. 05 min. W. elevation: 800mm. remarks: Used as food. Landrace. Seed.
- PI 537478 donor id: AN-CU-89. origin: Spain. local name:
 Calabaza. collected: March 06, 1985. locality:
 Mountainous, depression site, brown loam soil, low
 stoniness, good drainage, farmstore, Cortegana, Huelva
 Province. latitude: 37 deg. 50 min. N. longitude: 006
 deg. 50 min. W. elevation: 690mm. remarks: Used as
 food. Landrace. Seed.
- PI 537479 donor id: CA-CU-17. origin: Spain. local name: Pantana. collected: April 14, 1987. locality: Plain level, level site, brown clay soil, Valle Guerra. latitude: 28 deg. 31 min. N. longitude: 016 deg. 24 min. W. elevation: 150m. remarks: Sown December, January and February, harvested April- September. Fruits violet, green, and yellow. Cultivated. Seed.
- PI 537480 donor id: CA-CU-18. origin: Spain. local name:
 Calabaza. collected: April 14, 1987. locality: Barranco
 de San Juan, Tenerife Province. latitude: 28 deg. 28
 min. N. longitude: 016 deg. 25 min. W. elevation: 510m.
 remarks: Sown January, harvested September. Used in
 cooking. Cultivated. Seed.
- PI 537481 donor id: CA-CU-19. origin: Spain. local name:
 Calabaza. collected: April 14, 1987. locality: Plain
 level, brown soil, Barranco de San Juan, Tenerife
 Province. latitude: 28 deg. 28 min. N. longitude: 016
 deg. 25 min. W. elevation: 510m. remarks: Sown
 February-April. Used in cooking. Cultivated. Seed.
- PI 537482 donor id: CA-CU-20. origin: Spain. local name: Bubango. collected: April 14, 1987. locality: Tacoroute, Tenerife Province. latitude: 28 deg. 28 min. N. longitude: 016 deg. 25 min. W. elevation: 510m. Cultivated. Seed.
- PI 537483 donor id: CA-CU-21. origin: Spain. local name: Bubango. collected: April 14, 1987. locality: Tacoroute, Tenerife Province. latitude: 28 deg. 28 min. N. longitude: 016 deg. 25 min. W. elevation: 510m. Cultivated. Seed.

- PI 537484 donor id: CA-CU-22. origin: Spain. local name:
 Calabaza. collected: April 14, 1987. locality: Barranco
 de San Juan, Tenerife Province. latitude: 28 deg. 28
 min. N. longitude: 016 deg. 25 min. W. elevation: 300m.
 remarks: Used in cooking. Cultivated. Seed.
- PI 537485 donor id: CA-CU-23. origin: Spain. local name: Pantana. collected: April 14, 1987. locality: Clay, La Esperauza, Tenerife Province. latitude: 28 deg. 27 min. N. longitude: 016 deg. 23 min. W. elevation: 600m. remarks: Sown all year. Cultivated. Seed.
- PI 537486 donor id: CA-CU-24. origin: Spain. local name:
 Calabaza. collected: April 15, 1987. locality: Valle
 Guerra, Tenerife Province. latitude: 28 deg. 31 min. N.
 longitude: 016 deg. 24 min. W. elevation: 150m.
 remarks: Used in cooking. Cultivated. Seed.
- PI 537487 donor id: CA-CU-25. origin: Spain. local name:
 Calabaza. locality: Valle Guerra, Tenerife Province.
 latitude: 28 deg. 31 min. N. longitude: 016 deg. 24 min.
 W. elevation: 150m. Cultivated. Seed.
- PI 537488 donor id: CA-CU-26. origin: Spain. local name: Bubango. collected: April 14, 1987. locality: Farmland, Igueste de Caudelania, Tenerife Province. latitude: 28 deg. 20 min. N. longitude: 016 deg. 23 min. W. elevation: 100m. remarks: Cold resistant. Sown all year. Fruits green, rounded. Landrace. Seed.
- PI 537489 donor id: CA-CU-27. origin: Spain. local name: Bubaugo. collected: April 14, 1987. locality: Farmland, Igueste de Caudelaria, Tenerife Province. latitude: 28 deg. 20 min. N. longitude: 016 deg. 23 min. W. elevation: 100m. remarks: Sown all year. Fruits large, rounded, whitish. Landrace. Seed.
- PI 537490 donor id: CA-CU-28. origin: Spain. local name: Bubaugo. collected: April 14, 1987. locality: Farmland, Igueste de Caudelaria, Tenerife Province. latitude: 28 deg. 20 min. N. longitude: 016 deg. 23 min. W. elevation: 100m. remarks: Fruits elongated, white. Landrace. Seed.
- PI 537491 donor id: CA-CU-29. origin: Spain. local name: Calabaza. collected: April 14, 1987. locality: Cueveritar de Coudetana. Cultivated. Seed.
- PI 537492 donor id: CA-CU-30. origin: Spain. local name:
 Calabaza. collected: April 14, 1987. locality: La
 Medida, Tenerife Province. latitude: 28 deg. 16 min. N.
 longitude: 016 deg. 25 min. W. elevation: 450m.
 remarks: Fruits elongated. Cultivated. Seed.

- PI 537493 donor id: CA-CU-31. origin: Spain. collected: April 14, 1987. locality: La Medida, Sta. Cruz de Tenerife. latitude: 28 deg. 16 min. N. longitude: 016 deg. 25 min. W. elevation: 450m. remarks: Fruits variable black, rounded, flattened, yellow. Cultivated. Seed.
- PI 537494 donor id: CA-CU-32. origin: Spain. local name: Bubango. collected: April 18, 1987. locality: La Laguna. latitude: 18 deg. 28 min. N. longitude: 016 deg. 18 min. W. remarks: Sown March-April. Fruits rounded, white. Cultivated. Seed.
- PI 537495 donor id: CA-CU-33. origin: Spain. local name: Bubango. collected: April 14, 1987. locality: La Medida, Sta. Cruz de Tenerife. latitude: 28 deg. 16 min. N. longitude: 016 deg. 25 min. W. elevation: 450m. remarks: Fruits rounded, white changing to violet. Cultivated. Seed.
- PI 537496 donor id: CA-CU-34. origin: Spain. local name: Bubango. collected: April 14, 1987. locality: La Medida, Sta. Cruz de Tenerife. latitude: 28 deg. 16 min. N. longitude: 016 deg. 25 min. W. elevation: 450m. remarks: Fruits elongated, whitish. Cultivated. Seed.
- PI 537497 donor id: CA-CU-36. origin: Spain. local name: Calabaza de Gollet. collected: April 18, 1987. locality: Cuerneja. latitude: 28 deg. 00 min. N. longitude: 015 deg. 45 min. W. remarks: Cropped year around. Fruits green. Cultivated. Seed.
- PI 537498 donor id: CA-CU-37. origin: Spain. local name:
 Calabaza. collected: April 14, 1987. locality: S.
 Andies, Sta. Cruz de Tenerife. latitude: 28 deg. 30 min.
 N. longitude: 016 deg. 13 min. W. remarks: Fruits green and orange. Flesh orange. Cultivated. Seed.
- PI 537499 donor id: CA-CU-38. origin: Spain. local name:
 Calabaza. collected: April 14, 1987. locality: La
 Laguna. latitude: 16 deg. 20 min. N. longitude: 020
 deg. 28 min. W. remarks: Fruits rounded mixture of three
 types. Cultivated. Seed.
- PI 537500 donor id: CA-CU-39. origin: Spain. local name: Bubango. collected: April 16, 1987. locality: La Gomera, Sta. Cruz de Tenerife. latitude: 28 deg. 08 min. N. longitude: 017 deg. 14 min. W. elevation: 300m. remarks: Sown March, harvested August-September. Fruits rounded, mixture of three types. Cultivated. Seed.

- PI 537501 donor id: CA-CU-41. origin: Spain. local name: Calabaza bola (cabello angel). collected: April 18, 1987. locality: Cuerneja Province. latitude: 20 deg. 00 min. N. longitude: 015 deg. 45 min. W. elevation: 200-225m. remarks: Sown all year. Cultivated. Seed.
- PI 537502 donor id: CA-CU-43. origin: Spain. local name: Bubango. collected: April 16, 1987. locality: La Gomera, Sta. Cruz de Tenerife. latitude: 28 deg. 08 min. N. longitude: 017 deg. 14 min. W. elevation: 300m. remarks: Fruits large, green. Cultivated. Seed.
- PI 537503 donor id: CA-CU-45. origin: Spain. local name: Pantana. collected: April 26, 1987. locality: La Gomera, Sta. Cruz de Tenerife. latitude: 28 deg. 08 min. N. longitude: 017 deg. 14 min. W. remarks: Sown all year. Cold resistant. Fruits white and green. Cultivated. Seed.
- PI 537504 donor id: CA-CU-47. origin: Spain. local name: Bubango. collected: April 16, 1987. locality: Las Rosas, Sta. Cruz de Tenerife. latitude: 28 deg. 26 min. N. longitude: 016 deg. 22 min. W. elevation: 550m. remarks: Sown February, harvested June. Not irrigated. Fruits elongated and rounded, variable colors. Cultivated. Seed.
- PI 537505 donor id: CA-CU-48. origin: Spain. local name: Bubango. collected: April 18, 1987. locality: La Laguna. latitude: 16 deg. 22 min. N. longitude: 028 deg. 28 min. W. remarks: Sown March-April. Fruits white, two. Cultivated. Seed.
- PI 537506 donor id: CA-CU-49. origin: Spain. local name: Pantana. collected: April 16, 1987. locality: Las Rosas, Sta. Cruz de Tenerife. latitude: 28 deg. 26 min. N. longitude: 016 deg. 22 min. W. elevation: 550m. remarks: Fruits green. Cultivated. Seed.
- PI 537507 donor id: CA-CU-50. origin: Spain. local name: Pantana. collected: April 16, 1987. locality: Las Rosas, Sta. Cruz de Tenerife. latitude: 28 deg. 26 min. N. longitude: 016 deg. 22 min. W. elevation: 580m. remarks: Fruits large, yellow to whitish with spots. Cultivated. Seed.
- PI 537508 donor id: CA-CU-51. origin: Spain. local name: Bubango. collected: April 16, 1987. locality: Las Rosas, Sta. Cruz de Tenerife. latitude: 28 deg. 26 min. N. longitude: 016 deg. 22 min. W. elevation: 550m. remarks: Fruits yellow. Cultivated. Seed.

- PI 537509 donor id: CA-CU-52. origin: Spain. local name: Bubango. collected: April 16, 1987. locality: Las Rosas, Sta. Cruz de Tenerife. latitude: 28 deg. 26 min. N. longitude: 016 deg. 22 min. W. elevation: 550m. remarks: Fruits large, white. Cultivated. Seed.
- PI 537510 donor id: CA-CU-53. origin: Spain. local name: Pantana. collected: April 16, 1987. locality: Las Rosas, Sta. Cruz de Tenerife. latitude: 28 deg. 26 min. N. longitude: 016 deg. 22 min. W. elevation: 550m. remarks: Fruits green. Cultivated. Seed.
- PI 537511 donor id: CA-CU-54. origin: Spain. local name: Calabaza de agua. collected: April 16, 1987. locality: Las Rosas, Sta. Cruz de Tenerife. latitude: 28 deg. 26 min. N. longitude: 016 deg. 22 min. W. elevation: 550m. remarks: Fruits bottle-shaped. Cultivated. Seed.
- PI 537512 donor id: CA-CU-55. origin: Spain. local name: Calabaza del país. collected: April 16, 1987. locality:
 Valleverucoso, Gomera, Sta. Cruz de Tenerife. latitude: 28 deg. 10 min. N. longitude: 017 deg. 20 min. W. elevation: 230m. remarks: Fruits large, elongated, white. Cultivated. Seed.
- PI 537513 donor id: CA-CU-56. origin: Spain. collected: April 16, 1987. locality: Valleverucoso, Gomera, Sta. Cruz de Tenerife. latitude: 28 deg. 10 min. N. longitude: 017 deg. 20 min. W. elevation: 230m. remarks: Fruits rounded and elongated. Cultivated. Seed.
- PI 537514 donor id: CA-CU-57. origin: Spain. local name: Bubango. collected: April 17, 1987. locality: Alajero, Gomera, Sta. Cruz de Tenerife. latitude: 28 deg. 05 min. N. longitude: 017 deg. 15 min. W. elevation: 50m. remarks: Fruits of two types. Cultivated. Seed.
- PI 537515 donor id: CA-CU-58. origin: Spain. local name:
 Calabaza. collected: April 17, 1987. locality: Alajero,
 Gomera, Sta. Cruz de Tenerife. latitude: 28 deg. 05 min.
 N. longitude: 017 deg. 15 min. W. elevation: 200m.
 remarks: Fruit rounded, pumpkin-like. Cultivated. Seed.
- PI 537516 donor id: CA-CU-59. origin: Spain. local name: Bubango. collected: April 16, 1987. locality: Valle Guerra, Tenerife. latitude: 28 deg. 31 min. N. longitude: 016 deg. 24 min. W. elevation: 150m. Cultivated. Seed.
- PI 537517 donor id: CA-CU-60. origin: Spain. Seed.

PI 537476 to 537565-continued

- PI 537518 donor id: CA-CU-61. origin: Spain. local name:
 Calabaza. collected: April 18, 1987. locality: La
 Laguna, Sta. Cruz de Tenerife. latitude: 18 deg. 28 min.
 N. longitude: 018 deg. 18 min. W. remarks: Sown
 March-April. Seeds small. Cultivated. Seed.
- PI 537519 donor id: CA-CU-62. origin: Spain. Seed.
- PI 537520 donor id: CA-CU-63. origin: Spain. Seed.
- PI 537521 donor id: CA-CU-64. origin: Spain. Seed.
- PI 537522 donor id: CA-CU-65. origin: Spain. Seed.
- PI 537523 donor id: CA-CU-66. origin: Spain. Seed.
- PI 537524 donor id: CA-CU-67. origin: Spain. Seed.
- PI 537525 donor id: CA-CU-68. origin: Spain. Seed.
- PI 537526 donor id: CA-CU-70. origin: Spain. Seed.
- PI 537527 donor id: CA-CU-71. origin: Spain. local name: Calabaza cabello de angel. collected: April 18, 1987. locality: El Ganoual, Las Palmas Province. latitude: 28 deg. 01 min. N. longitude: 015 deg. 31 min. W. remarks: Fruits white. Cultivated. Seed.
- PI 537528 donor id: CA-CU-72. origin: Spain. Seed.
- PI 537529 donor id: CA-CU-73. origin: Spain. Seed.
- PI 537530 donor id: CA-CU-74. origin: Spain. Seed.
- PI 537531 donor id: CA-CU-81. origin: Spain. Seed.
- PI 537532 donor id: CA-CU-84. origin: Spain. local name:
 Calabaza. collected: April 18, 1987. locality: El
 Gauoual, Las Palmas Province. latitude: 28 deg. 01 min.
 N. longitude: 015 deg. 31 min. W. remarks: Used in
 cooking. Fruits elongated, yellow. Cultivated. Seed.
- PI 537533 donor id: CA-CU-85. origin: Spain. local name:
 Calabacino. collected: April 18, 1987. locality: El
 Gauoual, Las Palmas Province. latitude: 28 deg. 01 min.
 N. longitude: 018 deg. 31 min. W. elevation: 500m.
 remarks: Probably pumpkin. Cultivated. Seed.

- PI 537534 donor id: CA-CU-86. origin: Spain. local name:
 Calabaza. collected: April 18, 1987. locality: Tejeda,
 Las Palmas Province. latitude: 28 deg. 00 min. N.
 longitude: 018 deg. 40 min. W. elevation: 1050m.
 remarks: Sown April, harvested August. Fruits elongated.
 Cultivated. Seed.
- PI 537535 donor id: CA-CU-90. origin: Spain. local name: Calabaza potaje. collected: April 18, 1987. locality: Barranco de Tretel, La Pinta. latitude: 28 deg. 32 min. N. longitude: 017 deg. 50 min. W. elevation: 30m. remarks: Fruits green with yellow lines, fleshy. Cultivated. Seed.
- PI 537536 donor id: CA-CU-91. origin: Spain. local name: Calabaza de Gollete. collected: April 18, 1987. locality:
 Barranco de Tretel, La Pinta. latitude: 28 deg. 32 min.
 N. longitude: 017 deg. 50 min. W. elevation: 30m.
 remarks: Fruits green and yellow, spotted. Cultivated.
 Seed.
- PI 537537 donor id: CA-CU-92. origin: Spain. local name:
 Calabaza. collected: April 18, 1987. locality: Barranco
 de Tretel. latitude: 28 deg. 32 min. N. longitude: 017
 deg. 50 min. W. elevation: 30m. remarks: Fruit large,
 rounded, spotted. Cultivated. Seed.
- PI 537538 donor id: CA-CU-93. origin: Spain. local name:
 Calabaza. collected: April 18, 1987. locality: Teguise,
 Las Palmas Province. latitude: 29 deg. 06 min. N.
 longitude: 013 deg. 37 min. W. remarks: Sown
 March-April-May, harvested in 4 months. Fruit large,
 rounded, black. Cultivated. Seed.
- PI 537539 donor id: CA-CU-94. origin: Spain. local name:
 Calabaza. collected: April 18, 1987. locality: Teguise,
 Las Palmas Province. latitude: 29 deg. 06 min. N.
 longitude: 013 deg. 37 min. W. remarks: Fruits
 flattened, green and yellow, spotted. Cultivated. Seed.
- PI 537540 donor id: CA-CU-95. origin: Spain. local name:
 Calabaza. collected: April 18, 1987. locality: Munilgue
 (Teguise), Lanzarote. latitude: 29 deg. 06 min. N.
 longitude: 013 deg. 37 min. W. remarks: Fruit large,
 flattened, ribbed. Cultivated. Seed.
- PI 537541 donor id: CA-CU-96. origin: Spain. local name:
 Calabaza. collected: April 18, 1987. locality: Tinajo,
 Las Palmas, Lanzarote Province. latitude: 29 deg. 07
 min. N. longitude: 013 deg. 40 min. W. elevation: 195m.
 remarks: Fruits rounded. Cultivated. Seed.

- PI 537542 donor id: CA-CU-98. origin: Spain. local name: Pantana. collected: April 18, 1987. locality: Tinajo, Las Palmas, Lanzarote Province. latitude: 29 deg. 07 min. N. longitude: 13 deg. 40 min. W. elevation: 195m. remarks: Fruit white-green. Seed.
- PI 537543 donor id: CA-CU-100. origin: Spain. local name:
 Calabaza. collected: April 18, 1987. locality: Guatiza,
 Las Palmas Province. latitude: 29 deg. 08 min. N.
 longitude: 013 deg. 35 min. W. elevation: 360m.
 remarks: Fruits of three types, large, elongated,
 flattened. Cultivated. Seed.
- PI 537544 donor id: CA-CU-102. origin: Spain. local name:
 Calabaza. collected: April 18, 1987. locality: Teguise,
 Las Palmas Province. latitude: 29 deg. 06 min. N.
 longitude: 013 deg. 37 min. W. remarks: Fruits
 flattened. Cultivated. Seed.
- PI 537545 donor id: CA-CU-103. origin: Spain. local name:
 Calabaza. collected: April 18, 1987. locality: Tias,
 Las Palmas, Lanzarote Province. latitude: 28 deg. 50
 min. N. longitude: 013 deg. 45 min. W. remarks: Fruit
 rounded. Cultivated. Seed.
- PI 537546 donor id: CA-CU-104. origin: Spain. local name:
 Pantana. collected: April 18, 1987. locality: Tias, Las
 Palmas, Lanzarote Province. latitude: 28 deg. 50 min. N.
 longitude: 013 deg. 45 min. W. remarks: Fruits white.
 Cultivated. Seed.
- PI 537547 donor id: CA-CU-105. origin: Spain. local name:
 Calabaza. collected: April 18, 1987. locality: Tias,
 Las Palmas, Lanzarote Province. latitude: 28 deg. 50
 min. N. longitude: 013 deg. 45 min. W. remarks: Fruits
 large, rounded, yellow. Cultivated. Seed.
- PI 537548 donor id: CA-CU-106. origin: Spain. local name:
 Calabacino. collected: April 18, 1987. locality: Los
 Olivos. latitude: 30 deg. 05 min. N. longitude: 015
 deg. 30 min. W. elevation: 400m. remarks: Sown
 February. Cultivated. Seed.
- PI 537549 donor id: CA-CU-107. origin: Spain. local name:
 Calabaza cabello de angel. collected: April 18, 1987.
 locality: El Nontanon de S. Nateo, Gran Canaria Province.
 latitude: 28 deg. 00 min. N. longitude: 015 deg. 30 min.
 W. elevation: 800m. remarks: Sown February, harvested
 June-July. Fruits white. Cultivated. Seed.

- PI 537550 donor id: CA-CU-lll. origin: Spain. collected: April 18, 1987. locality: S. Nicolas, Las Palmas (Gran Canaria Province). latitude: 28 deg. 00 min. N. longitude: 015 deg. 45 min. W. remarks: Fruits mixed, rounded, pumpkin-like. Cultivated. Seed.
- PI 537551 donor id: C-CU-28. origin: Spain. local name: Carabassa rocha. collected: February 14, 1985. locality: Plain level, level site, brown soil, farmstore, Ripoll, Gerona (El Ripolles) Province. latitude: 42 deg. 12 min. N. longitude: 002 deg. 12 min. W. elevation: 691m. remarks: Sown April, harvested September. Cultivar. Seed.
- PI 537552 donor id: C-CU-30. origin: Spain. local name:
 Carabassa. collected: February 14, 1985. locality:
 Farmstore, Santa Pau, Gerona (La Garotxa) Province.
 latitude: 42 deg. 10 min. N. longitude: 002 deg. 32 min.
 W. elevation: 496m. remarks: Sown May-June. Cultivar.
 Seed.
- PI 537553 donor id: C-CU-32. origin: Spain. local name:
 Carabassa. collected: February 14, 1985. locality:
 Plain level, level site, black loam-clay soil, good
 drainage, farmstore, 0.3km N of Santa Pau, Gerona (La
 Garotxa) Province. latitude: 42 deg. 10 min. N.
 longitude: 002 deg. 32 min. W. elevation: 496m.
 remarks: Sown April-May, harvested July. Cultivar.
 Seed.
- PI 537554 donor id: C-CU-33. origin: Spain. local name:
 Carabassa. collected: February 14, 1985. locality:
 Plain level, level site, black loam-clay soil, good
 drainage, farmstore, 0.3km N of Santa Pau, Gerona (La
 Garotxa) Province. latitude: 42 deg. 10 min. N.
 longitude: 002 deg. 32 min. W. elevation: 496m.
 remarks: Sown April-May, harvested July. Cultivar.
 Seed.
- PI 537555 donor id: C-CU-35. origin: Spain. local name: Carabassa llarga. collected: February 14, 1985. locality: Plain level, level site, black loam-clay soil, good drainage, farmstore, Santa Pau, Gerona (La Garotxa) Province. latitude: 42 deg. 10 min. N. longitude: 002 deg. 32 min. W. elevation: 496m. remarks: Sown April-May, harvested July. Used as food. Cultivar. Seed.
- PI 537556 donor id: C-CU-36. origin: Spain. local name: Rebequet. collected: February 13, 1985. locality: Plain level, level site, brown soil, farmstore, Borrasia, Gerona Province. latitude: 42 deg. 15 min. N. longitude: 002 deg. 50 min. W. elevation: 73m. Cultivar. Seed.

- PI 537557 donor id: C-CU-39. origin: Spain. local name: Rebequet Veral. collected: February 12, 1985. locality: Plain level, level site, brown loam-highly organic soil, good drainage, farmstore, Vilabetran, Gerona Province. latitude: 42 deg. 15 min. N. longitude: 002 deg. 58 min. W. elevation: 26m. remarks: Sown May-June, harvested October/November. Interplanted with corn. Cultivar. Seed.
- PI 537558 donor id: C-CU-41. origin: Spain. local name:
 Carabassa. collected: February 12, 1985. locality:
 Plain level, level site, brown loam-highly organic soil,
 good drainage, farmstore, Vilabetran, Gerona Province.
 latitude: 42 deg. 15 min. N. longitude: 002 deg. 58 min.
 W. elevation: 26m. remarks: Sown May-June, harvested
 October-November. Interplanted with corn. Cultivar.
 Seed.
- PI 537559 donor id: C-CU-42. origin: Spain. local name: Cabell d'angel. collected: February 12, 1985. locality: Plain level, level site, brown, loam-highly organic soil, good drainage, farmstore, Perelada, Gerona Province. latitude: 42 deg. 19 min. N. longitude: 003 deg. 00 min. W. elevation: 2m. remarks: Sown March, harvested August. Cultivar. Seed.
- PI 537560 donor id: CM-CU-39. origin: Spain. local name:
 Calabaza. collected: March 12, 1985. locality:
 Undulating, level site, brown clay soil, low stoniness,
 moderate drainage, farmland, Ribatajada, Cuenca Province.
 latitude: 40 deg. 20 min. N. longitude: 002 deg. 10 min.
 W. elevation: 1000m. remarks: Sown May-June, harvested
 September. Seed used for food consumption. Landrace.
 Seed.
- PI 537561 donor id: E-CU-15. origin: Spain. local name: Calabaza. collected: January 14, 1985. locality: Mountainous, slope site, sandy-loam soil, rocky, drainage, farmstore, Navaconcejo, Cacere Province. latitude: 40 deg. 40 min. N. longitude: 005 deg. 50 min. W. elevation: 500m. remarks: Sown March, harvested September-October. Landrace. Seed.
- PI 537562 donor id: N-CU-2. origin: Spain. collected: March 11, 1984. locality: Farmland, Mizanda del Arga, Navarra Province. latitude: 42 deg. 29 min. N. longitude: 001 deg. 50 min. W. elevation: 339m. remarks: Used as adornment. Landrace. Seed.

PI 537476 to 537565-continued

- PI 537563 donor id: V-CU-137. origin: Spain. local name: Calabaza de asar. collected: March 06, 1985. locality: Serra, Valencia Province. latitude: 39 deg. 40 min. N. longitude: 000 deg. 27 min. W. elevation: 330m. remarks: Fruits flattened. Cultivated. Seed.
- PI 537564 donor id: V-CU-138. origin: Spain. local name: Calabaza de asar. collected: March 06, 1985. locality: Serra, Valencia Province. latitude: 39 deg. 40 min. N. longitude: 000 deg. 27 min. W. elevation: 330m. remarks: Fruits elliptical-shaped. Cultivated. Seed.
- PI 537565 donor id: V-CU-149. origin: Spain. collected: April 26, 1985. locality: Villar del Arzobispo, Valencia Province. latitude: 39 deg. 44 min. N. longitude: 000 deg. 50 min. W. elevation: 520m. Cultivated. Seed.
- PI 537566. Lolium perenne L. POACEAE Perennial ryegrass

Donated by: Fricker, C., Pure-Seed Testing, Inc., 3057 G Street, Hubbard, Oregon, United States. Received February 22, 1990.

origin: United States. origin institute: Pure-Seed Testing, 3057 G. St., Hubbard, Oregon 97032. cultivar: OMEGA II. pedigree: Advanced generation synthetic. other id: PVP 8400141. source: Certificate in force. group: PVPO. other id: CV-14. group: CSR-RYE. remarks: Maturity medium-early, attractive dark green color. Fine-lined turf which does not become excessively stemmy in late spring like early maturing cultivars and results in good spring density. Very good resistance to stem and crown rusts and improved resistance to brown patch, red thread, and Fusarium patch. Good wear tolerance. Used for home lawns, athletic fields, and golf course tees, fairways,. Perennial. Cultivar. Seed.

PI 537567. Lolium perenne L. POACEAE Perennial ryegrass

Donated by: Rose-Fricker, C.A., Pure-Seed Testing, Inc., 3057 G Street, Hubbard, Oregon, United States; and Zajac Performance Seeds; and Turf-Seed, Inc.. remarks: Saturn Perennial Ryegrass. Received February 22, 1990.

PI 537567-continued

origin: United States. origin institute: Pure-Seed Testing, Inc., 3057 G Street, Hubbard, Oregon 97032. cultivar: SATURN. pedigree: Advanced generation synthetic. other id: PVP 8800114. source: Pending. group: PVPO. other id: CV-141. group: CSR-OTHER GRASSES. remarks: Maturity medium with 50% heading date 7 days later than Pennfine. Persistent, dense, fine-textured, dark green turf-type. Good resistance to winter net blotch, pink snow mold, brown patch, and sem rust. Recommended for use in temperate growing areas of the U.S. and for winter overseeding of dormant warm-season turfs in the south. Perennial. Cultivar. Seed.

PI 537568. Lolium perenne L. POACEAE Perennial ryegrass

Donated by: Rose-Fricker, C.A., Pure-Seed Testing, Inc., 3057 G Street, Hubbard, Oregon, United States; and Turf-Seed, Inc.. remarks: 246 Perennial Ryegrass. Received February 22, 1990.

origin: United States. origin institute: Pure-Seed Testing, Inc., 3057 G Street, Hubbard, Oregon 97032. cultivar: 246. pedigree: Advanced generation synthetic. other id: PVP 8700084. source: Certificate in force. group: PVPO. other id: CV-142. group: CSR-OTHER GRASSES. remarks: Maturity medium. Lower-growing, turf-type, dark green, fine texture and reduced rate of vertical growth. Good resistance to net blotch, brown patch, and stem rust. Performs well over wide range of soil types at several locations in U.S. Recommended for cool-season areas where turf-type perennial ryegrasses are adapted. Outstanding for overseeding dormant bermudagrasses in southern parts of U.S. Used for. Perennial. Cultivar. Seed.

PI 537569 to 537574. Hordeum vulgare L. POACEAE Barley

Donated by: Cunfer, B.M., Georgia Agr. Exp. Sta., Dept. of Plant Pathology, Georgia Station, Univ. of Georgia, Griffin, Georgia, United States. remarks: Six (GA-23 to GA-28) Barley Germplasms. Received February 22, 1990.

- PI 537569 origin: United States. origin institute: Georgia Agr. Exp. Sta., Dept. of Plant Pathology, Univ. of Georgia, Griffin, Georgia 30223. cultivar: GA-23. pedigree: GA Jet/Cebada Capa. other id: GA 75-535A. other id: GP-123. source: Crop Sci. 30(6):1371 1990. group: CSR-BARLEY. remarks: Six-row semi-hardy germplasm with resistance to septoria nodorum blotch (Stagonospora nodorum). Yield high. Plant height 95cm. Maturity medium. Agronomic characteristics good. Winter Annual. Breeding Material. Seed.
- PI 537570 origin: United States. origin institute: Georgia Agr. Exp. Sta., Dept. of Plant Pathology, Univ. of Georgia, Griffin, Georgia 30223. cultivar: GA-24. pedigree: GA Jet/Volbar. other id: GA 77-397. other id: GP-124. source: Crop Sci. 30(6):1371 1990. group: CSR-BARLEY. remarks: Six-row semi-hardy germplasm with resistance to septoria nodorum blotch (Stagonospora nodorum). Yield high. Plant height 100cm. Maturity early. Agronomic characteristics good. Winter Annual. Breeding Material. Seed.
- PI 537571 origin: United States. origin institute: Georgia Agr. Exp. Sta., Dept. of Plant Pathology, Univ. of Georgia, Griffin, Georgia 30223. cultivar: GA-25. pedigree: NY 6005/Barsoy. other id: GA 72008. other id: GP-125. source: Crop Sci. 30(6):1371 1990. group: CSR-BARLEY. remarks: Six-row semi-hardy germplasm with resistance to septoria nodorum blotch (Stagonospora nodorum). Yield high. Plant height 100cm. Maturity early. Agronomic characteristics good. Winter Annual. Breeding Material. Seed.
- PI 537572 origin: United States. origin institute: Georgia Agr. Exp. Sta., Dept. of Plant Pathology, Univ. of Georgia, Griffin, Georgia 30223. cultivar: GA-26. pedigree: Volbar/*2Atlas 68. other id: GA 80-444. other id: GP-126. source: Crop Sci. 30(6):1371 1990. group: CSR-BARLEY. remarks: Six-row semi-hardy germplasm with resistance to septoria nodorum blotch (Stagonospora nodorum). Yield high. Plant height 108cm. Maturity medium. Agronomic characteristics good. Winter Annual. Breeding Material. Seed.

PI 537569 to 537574-continued

- PI 537573 origin: United States. origin institute: Georgia Agr. Exp. Sta., Dept. of Plant Pathology, Univ. of Georgia, Griffin, Georgia 30223. cultivar: GA-27. pedigree: VA 71-44-12/Knob. other id: GA 73022. other id: GP-127. source: Crop Sci. 30(6):1371 1990. group: CSR-BARLEY. remarks: Six-row semi-hardy germplasm with resistance to septoria nodorum blotch (Stagonospora nodorum). Yield high. Plant height 95cm. Maturity medium. Agronomic characteristics good. Winter Annual. Breeding Material. Seed.
- PI 537574 origin: United States. origin institute: Georgia Agr. Exp. Sta., Dept. of Plant Pathology, Univ. of Georgia, Griffin, Georgia 30223. cultivar: GA-28. pedigree: Volbar/Atlas 66. other id: GA 79-629. other id: GP-128. source: Crop Sci. 30(6):1371 1990. group: CSR-BARLEY. remarks: Six-row semi-hardy germplasm with resistance to septoria nodorum blotch (Stagonospora nodorum). Yield high. Plant height 100cm. Maturity medium. Agronomic characteristics good. Winter Annual. Breeding Material. Seed.
- PI 537575. Digitaria sanguinalis (L.) Scop. POACEAE Crabgrass

Donated by: Dalrymple, R.L., Noble Foundation, Agricultural Division, P.O. Box 2180, Ardmore, Oklahoma, United States. Received February 15, 1990.

origin: United States. cultivar: RED RIVER. Annual.
Cultivar. Seed.

PI 537576. Hordeum vulgare L. POACEAE Barley

Donated by: Schaller, C.W., California Agric. Exp. Sta., Dep. of Agronomy and Range Science., University of California, Davis, California, United States. remarks: UC 603 Barley. Received February 20, 1990.

origin: United States. cultivar: UC 603. pedigree:
Mari/Luther/2/Traill/3/Briggs/Prato Sib ,F5. other id:
CV-220. source: Crop Sci. 30(5):1154 1990. group:
CSR-BARLEY. remarks: 6-row feed type cultivar with short straw, early maturity, good standability, and resistance to scald (Rhynchosporium secalis), net blotch (Pyrenophora teres) and barley yellow dwarf virus. Test weight similar to Prato or UC 337. Moderate resistance to powdery mildew (Erysiphe graminis), and leaf rust (Puccinia hordei). Spring Annual. Cultivar. Seed.

PI 537577 to 537581. Pennisetum glaucum (L.) R. Br. POACEAE Pearl millet

Donated by: Singh, S.D., ICRISAT, Patancheru, Andhra Pradesh, India. remarks: Five Downy Mildew Resistant Pearl Millet Germplasms. Received February 20, 1990.

- PI 537577 origin: India. cultivar: ICML 12. pedigree: Selection from bulk germplasm from Mali. other id: IP 6118. other id: P 7. other id: GP-15. source: Crop Sci. 30(5):1164 1990. group: CSR-MILLET, PEARL. remarks: Pearl millet germplasm with stable resistance to downy mildew (Sclerospora graminicola) in India, Burkina Faso and Senegal. Plant height 1.5 to 2.0m. Days to flowering 50 to 60. Panicle 22 to 40cm. Seed grey to grey brown. Seed weight 6.1 to 7.7 per 1000. Moderately resistant to millet rust (Puccinia penniseti). Annual. Breeding Material. Seed.
- PI 537578 origin: India. cultivar: ICML 13. pedigree: Selection from bulk germplasm from Nigeria. other id: IP 8215. other id: SDN 503. other id: GP-16. source: Crop Sci. 30(5):1164 1990. group: CSR-MILLET, PEARL. remarks: Pearl millet germplasm with stable resistance to downy mildew (Sclerospora graminicola) in India, Burkina Faso and Senegal. Plant height 1.5 to 2.0m. Days to flowering 50 to 60. Panicle 22 to 40cm. Seed grey to grey brown. Seed weight 6.1 to 7.7 per 1000. Moderately resistant to millet rust (Puccinia penniseti). Annual. Breeding Material. Seed.
- PI 537579 origin: India. cultivar: ICML 14. pedigree: Selection from bulk germplasm from Nigeria. other id: IP 4984. other id: 700251. other id: GP-17. source: Crop Sci. 30(5):1164 1990. group: CSR-MILLET, PEARL. remarks: Pearl millet germplasm with stable resistance to downy mildew (Sclerospora graminicola) in India, Burkina Faso and Senegal. Plant height 1.5 to 2.0m. Days to flowering 50 to 60. Panicle 22 to 40cm. Seed grey to grey brown. Seed weight 6.1 to 7.7 per 1000. Moderately resistant to millet rust (Puccinia penniseti). Annual. Breeding Material. Seed.
- PI 537580 origin: India. cultivar: ICML 15. pedigree: Selection from bulk germplasm from Nigeria. other id: IP 5082. other id: 700516. other id: GP-18. source: Crop Sci. 30(5):1164 1990. group: CSR-MILLET, PEARL. remarks: Pearl millet germplasm with stable resistance to downy mildew (Sclerospora graminicola) in India, Burkina Faso and Senegal. Plant height 1.5 to 2.0m. Days to flowering 50 to 60. Panicle 22 to 40cm. Seed grey to grey brown. Seed weight 6.1 to 7.7 per 1000. Moderately resistant to millet rust (Puccinia penniseti). Annual. Breeding Material. Seed.

- PI 537581 origin: India. cultivar: ICML 16. pedigree: Selection from bulk germplasm from Nigeria. other id: IP 8198. other id: 700651. other id: GP-19. source: Crop Sci. 30(5):1164 1990. group: CSR-MILLET, PEARL. remarks: Pearl millet germplasm with stable resistance to downy mildew (Sclerospora graminicola) in India, Burkina Faso and Senegal. Plant height 1.5 to 2.0m. Days to flowering 50 to 60. Panicle 22 to 40cm. Seed grey to grey brown. Seed weight 6.1 to 7.7 per 1000. Moderately resistant to millet rust (Puccinia penniseti). Annual. Breeding Material. Seed.
- PI 537582 to 537586. Pennisetum glaucum (L.) R. Br. POACEAE Pearl millet

Donated by: Singh, S.D., ICRISAT, Patancheru, Andhra Pradesh, India. remarks: Five Rust Resistant Pearl Millet Germplasms. Received February 20, 1990.

- PI 537582 origin: India. cultivar: ICML 17. pedigree: Selection from bulk germplasm from Nigeria. other id: IP 5030. other id: 700481-21-8. other id: GP-20. source: Crop Sci. 30(5):1165 1990. group: CSR-MILLET, PEARL. remarks: Pearl millet germplasm with stable resistance to rust (Puccinia penniseti) and moderate high resistance to downy mildew (Sclerospora graminicola). At ICRISAT: Plant height 1 to 2m; days to maturity 50 to 60; seeds grey to greyish brown. Annual. Breeding Material. Seed.
- PI 537583 origin: India. cultivar: ICML 18. pedigree: Selection from bulk germplasm from United States. other id: IP 537 B. other id: GP-21. source: Crop Sci. 30(5):1165 1990. group: CSR-MILLET, PEARL. remarks: Pearl millet germplasm with stable resistance to rust (Puccinia penniseti) and moderate high resistance to downy mildew (Sclerospora graminicola). At ICRISAT: Plant height 1 to 2m; days to maturity 50 to 60; seeds grey to greyish brown. Annual. Breeding Material. Seed.
- PI 537584 origin: India. cultivar: ICML 19. pedigree: Selection from bulk germplasm from Mali. other id: IP 11776. other id: GP-22. source: Crop Sci. 30(5):1165 1990. group: CSR-MILLET, PEARL. remarks: Pearl millet germplasm with stable resistance to rust (Puccinia penniseti) and moderate high resistance to downy mildew (Sclerospora graminicola). At ICRISAT: Plant height 1 to 2m; days to maturity 50 to 60; seeds grey to greyish brown. Annual. Breeding Material. Seed.

PI 537585 origin: India. cultivar: ICML 20. pedigree: Selection from bulk germplasm from India. other id: IP 2084. other id: GP-23. source: Crop Sci. 30(5):1165 1990. group: CSR-MILLET, PEARL. remarks: Pearl millet germplasm with stable resistance to rust (Puccinia penniseti) and moderate high resistance to downy mildew (Sclerospora graminicola). At ICRISAT: Plant height 1 to 2m; days to maturity 50 to 60; seeds grey to greyish brown. Annual. Breeding Material. Seed.

PI 537586 origin: India. cultivar: ICML 21. pedigree: Selection from bulk germplasm from Cameroon. other id: IP 6132. other id: P 24. other id: GP-24. source: Crop Sci. 30(5):1165 1990. group: CSR-MILLET, PEARL. remarks: Pearl millet germplasm with stable resistance to rust (Puccinia penniseti) and moderate high resistance to downy mildew (Sclerospora graminicola). At ICRISAT: Plant height 1 to 2m; days to maturity 50 to 60; seeds grey to greyish brown. Annual. Breeding Material. Seed.

PI 537587. Pennisetum glaucum (L.) R. Br. POACEAE Pearl millet

Donated by: Singh, S.D., ICRISAT, Patancheru, Andhra Pradesh, India. remarks: ICMA & B 841 Pearl Millet Parental Lines. Received February 20, 1990.

origin: India. cultivar: ICMB 841. pedigree: Developed from 5141B (mae sterile line). other id: PL-18. source: Crop Sci. 30(6):1378 1990. group: CSR-MILLET, PEARL. remarks: Parental line with resistance to downy mildew (Sclerospora graminicola) and lodging. Plant height 140 to 180cm. Tillering moderate. Days to maturity 53 to 58. Seed weight 6 to 8g per 1000. Annual. Breeding Material. Seed.

PI 537588. Panicum virgatum L. POACEAE Switchgrass

Donated by: Barker, R.E., Agricultural Research Service -- USDA, National Forage Seed Prod. Res. Ctr., 3450 S.W. Campus Way, Corvallis, Oregon, United States; and Soil Conservation Service -- USDA; and North Dakota & Minnesota Agr. Exp. Sta.. remarks: Dacotah Switchgrass. Received February 20, 1990.

origin: United States. cultivar: DACOTAH. pedigree: Selection from PI 478002. other id: CV-132. source: Crop Sci. 30(5):1158 1990. group: CSR-OTHER GRASSES. other id: NDG-965-98. remarks: Cultivar with early maturity, adaquate forage and higher latitude of adaptation then presently available varieties. For use in the Conservation Reserve Program, stabilization of critical areas, grass waterways, component of grass mixture for warm-season pastures, nature trails, habitat for upland game birds and waterfowl and where establishment of native vegetation is an objective. Perennial. Cultivar. Seed.

PI 537589. Andropogon gerardii Vitman POACEAE Big bluestem

Donated by: Barker, R.E., Agricultural Research Service -- USDA, National Forage Seed Prod. Res. Ctr., 3450 S.W. Campus Way, Corvallis, Oregon, United States; and Soil Conservation Service -- USDA; and North Dakota & Minnesota Agr. Exp. Sta.. remarks: Bison Big Bluestem. Received February 20, 1990.

origin: United States. cultivar: BISON. pedigree: Selection from PI 477994. other id: CV-9. source: Crop Sci. 30(5):1155 1990. group: CSR-BLUESTEM. remarks: Cultivar with early maturity, superior winter hardiness and a higher latitude of adaption then presently used varieties. For use in the Conservation Reserve Program, stabilization of critical areas, grass waterways, providing cover and nesting for upland game birds, nature trails, rural beautification and where establishment of native vegetation is an objective. Perennial. Cultivar. Seed.

PI 537590 to 537593. Allium cepa L. LILIACEAE Onion

Donated by: Texas Agricultural Exp. Station, USDA-ARS, Texas A&M University, College Station, Texas, United States. Received February 27, 1990.

PI 537590 origin: United States. cultivar: TEXAS GRANO 1015Y.
other id: PVP 8200170. source: Certificate in force.
group: PVPO. remarks: Short day. Maturity late. Flat
globe bulb type. Plant height 85cm, compact. Leaves (5-9)
medium green. Bulb skin pale yellow, interior white.
Susceptible to black mold Aspergillus alliaceus), and
purple blotch (Alternaria porri). Resistant to neck rot
(Botrytis ssp.) and pink root (Fusarium spp.).
Susceptible to thrip. Biennial. Cultivar. Seed.

PI 537590 to 537593-continued

- PI 537591 origin: United States. cultivar: TEXAS GRANO 1025Y.
 other id: PVP 8200171. source: Certificate in force.
 group: PVPO. remarks: Short day. Maturity late. Globe
 bulb type. Plant height 65cm. Leaves (6-9) light green.
 Bulb skin pale yellow, interior white. Susceptible to
 black mold (Aspergillus alliaceus) and purple blotch
 (Alternaria porri). Resistant to neck rot (Botrytis ssp.)
 and pink root (Fusarium ssp.). Susceptible to thrip.
 Biennial. Cultivar. Seed.
- PI 537592 origin: United States. cultivar: TEXAS GRANO 1030Y.
 other id: PVP 8200172. source: Certificate in force.
 group: PVPO. remarks: Short day. Maturity late. Flat
 globe bulb type. Plant height 60cm. Leaves (3-9) medium
 green. Bulb skin pale yellow, interior white. Susceptible
 to black mold (Aspergillus alliaceus) and purple blotch
 (Alternaria porri). Resistant to neck rot (Botrytis spp.)
 and pink root (Fusarium ssp.). Susceptible to thrip.
 Biennial. Cultivar. Seed.
- origin: United States. cultivar: TEXAS GRANO 1105Y.
 other id: PVP 8200173. source: Certificate in force.
 group: PVPO. remarks: Short day. Maturity late. Flat
 globe bulb type. Plant height 85cm. Leaves (4-9) medium
 green. Bulb skin pale yellow, interior white. Susceptible
 to black mold (Aspergillus alliaceus) and purple blotch
 (Alternaria porri). Resistant to neck rot (Botrytis spp.)
 and pink root (Fusarium spp.). Susceptible to thrip.
 Biennial. Cultivar. Seed.
- PI 537594. Festuca rubra subsp. commutata Gaud. POACEAE Chewings fescue

Donated by: Von Schmieder, M., Saatzucht Steinach, 8441 Steinach ub. Straubing, Germany, Federal Rep of. Received February 27, 1990.

origin: Germany, Federal Rep of. cultivar: MILAN. other id: PVP 8400020. source: Certificate in force. group: PVPO. remarks: Maturity very late. Plant height 670mm, medium light green, semi-erect. Rhyzome and palea absent. Resistant to Powdery mildew (Erystphe graminis), F. Patch, Pink snow-mold (Fusarium nivale), and Red thread (Carticium fusciforme). Similar to Highlight. Cultivar. Seed.

PI 537595. Eriogonum niveum Douglas ex Benth. POLYGONACEAE Snow buckwheat

Donated by: Lambert, S.M., National Plant Materials Center, USDA-SCS, Pullman, Washington, United States. remarks: Received through National Plant Materials Center, Beltsville, Maryland. Received October 24, 1990.

origin: United States. cultivar: UMATILLA. collected: 1979. other id: U-10. other id: 9033813. locality: From a native population in silt loam to sandy soil near Juniper Canyon, Umatilla County. remarks: Half shrub, about 10m tall, with spreading branches. Flowers white to pinkish, bloom in late summer. Good source of nectar for honeybees. Achenes brown. Leaves green densely covered by white hairs. Mature in October. Good food for wildlife. Plant is substantial for early spring diet of mule deer along the Columbia Breaks in north-central Washington State. Cultivated. Seed.

PI 537596 to 537712. Carthamus tinctorius L. ASTERACEAE Safflower

Donated by: Rubis, D.D., Department of Plant Science, University of Arizona, Tucson, Arizona, United States. Received December 1989.

- PI 537596 donor id: 1001. origin: United States. other id: R5819. remarks: Selected for flower color genetics. Flowers "dirty orange". Contains 2 recessive genes for "dirty dilute" color (dldl), 2 dominant genes for dilute color (DD), and 2 recessive genes for orange color (oo). Breeding Material. Seed.
- PI 537597 donor id: 1002. origin: United States. other id: R5820. remarks: Selected for flower color genetics. Flowers "dirty orange". Contains 2 recessive genes for "dirty dilute" color (dldl), 2 dominant genes for dilute color (DD), and 2 recessive genes for orange color (oo). Hull yellowish to light tan with 2 recessive genes for light hulls (ltlt). Breeding Material. Seed.
- PI 537598 donor id: 1003. origin: United States. other id: R5821. remarks: Selected for flower color genetics. Flowers "dilute yellow". Contains 2 dominant genes for "dirty dilute" color (DlDl), 2 recessive genes for dilute color (dd), and 2 recessive genes for orange color (oo). Breeding Material. Seed.
- PI 537599 donor id: 1004. origin: United States. other id: R5822. remarks: Selected for flower color genetics. Flowers "dilute orange". Contains 2 dominant genes for "dirty dilute" color (DlDl), 2 recessive genes for dilute color (dd), and 2 recessive genes for orange color (oo). Breeding Material. Seed.

- PI 537600 donor id: 1005. origin: United States. other id: R5823. remarks: Selected for flower color genetics. Flowers orange. Contains 2 dominant genes for "dirty dilute" color (DlDl), 2 dominate genes for dilute color (DD), and 2 recessive genes for orange color (oo). Breeding Material. Seed.
- PI 537601 donor id: 1006. origin: United States. other id: R5824. remarks: Selected for flower color genetics. Flowers yellow. Contains 2 dominant genes for "dirty dilute" color (DlDl), 2 dominate genes for dilute color (DD), and 2 dominant genes for yellow color (00). Breeding Material. Seed.
- PI 537602 donor id: 1007. origin: United States. other id: R5825. remarks: Selected for flower color genetics. Flowers "dirty dilute yellow". Contains 2 recessive genes for "dirty dilute" (dldl), 2 recessive genes for dilute color (dd) and 2 dominant genes for yellow color (00). Breeding Material. Seed.
- PI 537603 donor id: 1008. origin: United States. other id: R5829. remarks: Selected for flower color genetics. Flowers "dilute cream color". Contains 2 dominant genes for "dirty dilute" color (DlDl), 2 recessive genes for dilute color (dd) and 2 recessive genes for light yellow color (cc). Breeding Material. Seed.
- PI 537604 donor id: 1010. origin: United States. other id: R5834. remarks: Selected for flower color genetics. Flowers "dilute red" Contains 2 recessive genes for flower color (dd), and 2 recessive genes for red flower color (rr). Hull type gray striped with 2 recessive genes for gray striped hulls (stp g stp g). Breeding Material. Seed.
- PI 537605 donor id: 1011. origin: United States. other id: R5835. remarks: Selected for flower color genetics. Flowers "dilute red". Contains 2 recessive genes for dilute flower color (dd), and 2 recessive genes for red flower color (rr). Hull type gray striped with 2 recessive genes for gray striped hulls (stp g stp g). Breeding Material. Seed.
- PI 537606 donor id: 1012. origin: United States. other id: R5682. remarks: Selected for flower color genetics. Flowers red. Contains 2 dominant genes for dilute flower color (DD), and 2 recessive genes for red color (rr). Breeding Material. Seed.

- PI 537607 donor id: 1013. origin: United States. other id: R5538. remarks: Selected for flower color genetics. Flowers white. Contains 2 recessive genes for white flower color (yy). Hulls purple striped with 2 recessive genes for purple striped hulls (stp p stp p). Breeding Material. Seed.
- PI 537608 donor id: 1014. origin: United States. other id: R4093. remarks: Selected for flower color genetics. Flowers pink. Contains 2 recessive genes for pigmentlessness (pp) and 2 recessive genes for orange flower color (oo). Breeding Material. Seed.
- PI 537609 donor id: 1015. origin: United States. other id: R4097. remarks: Selected for flower color genetics. Flowers pink. Contains 2 recessive genes for pigmentlessness (pp) and 2 recessive genes for orange flower color (oo). Breeding Material. Seed.
- PI 537610 donor id: 1016. origin: United States. other id: R4103. remarks: Selected for flower color genetics. Flowers florescent-like, light red. Contains 2 recessive genes for pigmentlessness (pp) and 2 recessive genes for red flower color (rr). Breeding Material. Seed.
- PI 537611 donor id: 1017. origin: United States. other id: R8835. remarks: Primarily selected for spinelessness. Flowers white. Hulls purple striped. Contains 2 recessive genes for purple striped hulls (stp p stp p) and characteristics for spinelessness, large heads and many bracts. Breeding Material. Seed.
- PI 537612 donor id: 1018. origin: United States. other id: R8838. remarks: Primarily selected for spinelessness. Flowers yellow. Hulls purple striped. Contains 2 recessive genes for purple striped hulls (stp p stp p). Plants spineless. Bracts fair. Breeding Material. Seed.
- PI 537613 donor id: 1019. origin: United States. other id: R8851. remarks: Primarily selected for spinelessness. Flowers orange. Hulls gray striped. Contains 2 recessive genes for gray striped hulls (stp g stp g). Plants spineless with numerous rounded bracts. Breeding Material. Seed.
- PI 537614 donor id: 1020. origin: United States. other id: R8862. remarks: Primarily selected for spinelessness. Flowers orange. Hulls gray striped. Contains a dominant gene for gray striped hulls and a recessive gene for purple striped hulls (stp g /stp p). Plants spineless. Breeding Material. Seed.

- PI 537615 donor id: 1021. origin: United States. other id: R8865. remarks: Primarily selected for spinelessness. Flowers orange. Hulls gray striped. Contains 2 recessive genes for gray striped hulls (stp g stp g). Plants spineless. Breeding Material. Seed.
- PI 537616 donor id: 1022. origin: United States. other id: R8871. remarks: Primarily selected for spinelessness. Flowers yellow. Hulls purple striped. Contains 2 recessive genes for gray striped hulls (stp p stp p). Spininess 0.1 on spiny index. Breeding Material. Seed.
- PI 537617 donor id: 1023. origin: United States. other id: R8990-1. remarks: Primarily selected for spinelessness. Flowers orange. Plants spineless. Breeding Material. Seed.
- PI 537618 donor id: 1024. origin: United States. other id:
 R9002-1. remarks: Primarily selected for spinelessness.
 Flowers red. Spininess 0.5 on spiny index. Breeding
 Material. Seed.
- PI 537619 donor id: 1025. origin: United States. other id: R1194. remarks: Primarily selected for spinelessness. Flowers red. Plants spineless. Breeding Material. Seed.
- PI 537620 donor id: 1026. origin: United States. other id:
 Rll32-1. remarks: Primarily selected for rust resistance
 from wild material. Rust resistant. Some plants open
 pollinated. Breeding Material. Seed.
- PI 537621 donor id: 1027. origin: United States. pedigree:
 Derived from backcrossing white flower color to Ole.
 other id: R6270. remarks: Primarily selected for rust
 resistance from wild material. Flowers yellow. Hulls
 purple striped (stp p stp p). Rust resistance. Breeding
 Material. Seed.
- PI 537622 donor id: 1028. origin: United States. other id: R6271. remarks: Primarily selected for rust resistance. Flowers lemon yellow. Hulls gray striped, thin. Contains a recessive gene for thinness, a dominant gene for gray striped hulls and a recessive gene for purple striped hulls (th/stp g/stp p). Rust resistant. Plants segregating for hull type. Breeding Material. Seed.
- PI 537623 donor id: 1029. origin: United States. other id: R6275. remarks: Primarily selected for rust resistance. Flowers lemon yellow. Hulls gray striped (stpg). Rust resistant. Seeds tannish. Breeding Material. Seed.

- PI 537624 donor id: 1030. origin: United States. other id:
 Rl145-1. remarks: Primarily selected for rust
 resistance. Flowers orange or yellow. Best source of rust
 resistance. Breeding Material. Seed.
- PI 537625 donor id: 1031. origin: United States. other id:
 Rl145-2. remarks: Primarily selected for rust
 resistance. Flowers yellow. Hulls purple striped.
 Contains two recessive genes for purple striped hulls
 (stp p stp p). Rust resistant. Seed from open
 pollination. Breeding Material. Seed.
- PI 537626 donor id: 1032. origin: United States. other id: R6472. remarks: Primarily selected for rust resistance. Flowers lemon yellow. Rust resistant. Breeding Material. Seed.
- PI 537627 donor id: 1033. origin: United States. other id:
 R3497-1. remarks: Primarily selected for rust tolerance.
 Flowers orange. Hulls gray striped. Contains a dominant gene for thin hulls and recessive gene for gray striped hulls (th/stp g). Rust tolerant. Reduced hull. Breeding Material. Seed.
- PI 537628 donor id: 1034. origin: United States. other id:
 R3531-1. remarks: Primarily selected for rust tolerance.
 Flowers red. Hulls purple striped, yellowish to light
 tan. Contains 2 recessive genes for purple striped hulls
 and 2 recessive genes for light hulls (stp p stp p ltlt),
 Rust tolerant. Line good. Breeding Material. Seed.
- PI 537629 donor id: 1035. origin: United States. other id:
 R3531-2. remarks: Primarily selected for rust tolerance.
 Flowers red. Hulls purple striped, yellowish to light
 tan. Contains 2 recessive genes for purple striped hulls
 and 2 recessive genes for light hulls (stp p stp p ltlt).
 Rust tolerant. Line good. Segregating for stp p.
 Breeding Material. Seed.
- PI 537630 donor id: 1036. origin: United States. other id:
 R3551-1. remarks: Primarily selected for rust tolerance.
 Flowers orange. Hulls purple striped. Contains 2
 recessive genes for purple striped hulls (stp p stp p).
 Rust tolerant. Segregating for stp p. Breeding Material.
 Seed.
- PI 537631 donor id: 1037. origin: United States. other id: N1. remarks: Primarily selected for rust tolerance. Flowers red. Plants spineless. Self pollinating; pollination occurs before style elongation. Breeding Material. Seed.

- PI 537632 donor id: 1038. origin: United States. other id:
 R4336-10. remarks: Primarily selected for Verticillium
 wilt resistance. Flowers yellow. Hulls gray striped.
 Contains 2 recessive genes for gray striped hulls (stp g
 stp g). Verticillium wilt resistant. Breeding Material.
 Seed.
- PI 537633 donor id: 1039. origin: United States. other id:
 R4241-5. remarks: Primarily selected for Verticillium
 wilt resistance. Flowers orange. Hulls purple striped.
 Contains 2 recessive genes for purple striped hulls (stp
 p stp p). Verticillium wilt resistant. Breeding
 Material. Seed.
- PI 537634 donor id: 1040. origin: United States. other id:
 R4241-4. remarks: Primarily selected for Verticillium
 wilt resistance. Flowers orange. Hulls gray striped.
 Contains a dominant gene for gray striped hulls and a
 recessive gene for purple striped hulls (stp g/stp p).
 Verticillium wilt resistant. Breeding Material. Seed.
- PI 537635 donor id: 1041. origin: United States. other id:
 R4551-6. remarks: Primarily selected for Verticillium
 wilt resistance. Flowers orange. Hulls purple striped.
 Contains 2 recessive genes for purple striped hulls (stp
 p stp p). Verticillium wilt resistant. Breeding
 Material. Seed.
- PI 537636 donor id: 1042. origin: United States. other id:
 R4334-5. remarks: Primarily selected for Verticillium
 wilt resistance. Flowers orange. Hulls gray striped.
 Contains a dominant gene for gray striped hulls and a
 recessive gene for purple striped hulls (stp g stp p).
 Verticillium wilt resistant. Breeding Material. Seed.
- PI 537637 donor id: 1043. origin: United States. other id:
 R4240-3. remarks: Primarily selected for Verticillium
 wilt resistance. Flowers orange. Hulls purple striped.
 Contains 2 recessive genes for purple striped hulls (stp
 p stp p). Verticillium wilt resistant. Breeding
 Material. Seed.
- PI 537638 donor id: 1044. origin: United States. other id: R1816.
 remarks: Primarily selected for Verticillium wilt
 resistance. Flowers orange. Hulls purple striped.
 Contains 2 recessive genes for purple striped hulls (stp
 p stp p). Verticillium wilt resistant. Breeding
 Material. Seed.

- PI 537639 donor id: 1045. origin: United States. other id: R1829. remarks: Primarily selected for Verticillium wilt resistance. Flowers orange. Hulls purple striped. Contains 2 recessive genes for purple striped hulls (stp p stp p). Verticillium wilt resistant. Breeding Material. Seed.
- PI 537640 donor id: 1046. origin: United States. other id:
 R3919-2. remarks: Primarily selected for seed dormancy.
 Flowers orange. Hulls purple striped. Contains 2
 recessive genes for purple striped hulls (stp p stp p).
 Royal type. Breeding Material. Seed.
- PI 537641 donor id: 1047. origin: United States. other id:
 R5443-2. remarks: Primarily selected for seed dormancy.
 Flowers yellow or orange. Hulls brown striped (stp stp).
 Multiple cross from wild. Breeding Material. Seed.
- PI 537642 donor id: 1048. origin: United States. other id: R5447. remarks: Primarily selected for seed dormancy. Flowers yellow or orange. Hulls brown striped (stp stp). Multiple cross from wild. Breeding Material. Seed.
- PI 537643 donor id: 1049. origin: United States. other id: R5446. remarks: Primarily selected for seed dormancy. Flowers yellow or orange. Hulls brown striped (stp stp). Multiple cross from wild. Breeding Material. Seed.
- PI 537644 donor id: 1053. origin: United States. other id: R9883. remarks: Primarily selected for marker genes. Flowers orange. Head single, fertile (Sih sih). Maintained as Sih sih. Breeding Material. Seed.
- PI 537645 donor id: 1054. origin: United States. other id:
 R7665-3. remarks: Primarily selected for marker genes.
 Flowers orange. Hulls thin. Contains 2 recessive genes for thin hulls (thth). Chlorotic mutant, maintained as Chl chl. Breeding Material. Seed.
- PI 537646 donor id: 1055. origin: United States. other id:
 R62240. remarks: Primarily selected for marker genes.
 Flowers white or orange. Hulls brown striped (stp stp
 pp). Chlorotic mutant, maintained as Ch2 ch2. Breeding
 Material. Seed.
- PI 537647 donor id: 1058. origin: United States. other id: R9246. remarks: Primarily selected for marker genes. Flowers orange. Chlorophyll dwarf clcl. Breeding Material. Seed.

- PI 537648 donor id: 1059. origin: United States. other id: R6259. remarks: Primarily selected for marker genes. Flowers dilute white. Contains bu bu burnt for small plant burnt back. Breeding Material. Seed.
- PI 537649 donor id: 1060. origin: United States. other id: R6291. remarks: Primarily selected for marker genes. Flowers yellow. Contains bu bu burnt. Breeding Material. Seed.
- PI 537650 donor id: 1061. origin: United States. other id: R2056. remarks: Primarily selected for marker genes. Flowers yellow or orange. Hulls brown striped (plpl stp stp). Plants prostrate (pr pr). Breeding Material. Seed.
- PI 537651 donor id: 1062. origin: United States. other id: R2112. remarks: Primarily selected for marker genes. Flowers yellow or orange. Hulls brown striped (plpl stp stp). Plants prostrate (pr pr). Breeding Material. Seed.
- PI 537652 donor id: 1063. origin: Mexico. other id: R4805. remarks: Primarily selected for marker genes. Flowers orange. Genotype contains genes for dwarfism (mdw mdw). Seeds obtained from Lee Uric. Breeding Material. Seed.
- PI 537653 donor id: 1064. origin: United States. other id: R6349. remarks: Primarily selected for large heads. Flowers yellow. Heads large. From N6 field, 1969. Breeding Material. Seed.
- PI 537654 donor id: 1065. origin: United States. other id: R4114. remarks: Primarily selected for large heads. Flowers yellow. Heads large. Breeding Material. Seed.
- PI 537655 donor id: 1066. origin: United States. other id: R4078. remarks: Primarily selected for Hull type. Flowers red. Hulls gray striped, physiologically thinner. Contains 2 recessive genes for gray striped hulls (stp g stp g). Breeding Material. Seed.
- PI 537656 donor id: 1068. origin: United States. pedigree:
 Selected from Ul5. other id: R7144-1. remarks:
 Primarily selected for high oil content. Flowers orange.
 Oil content 64%. Breeding Material. Seed.
- PI 537657 donor id: 1069. origin: United States. pedigree:
 Selected from A9291. other id: R7145-2. remarks:
 Primarily selected for high oil content. Flowers orange.
 Hulls brown striped. Oil content 63%. Breeding Material.
 Seed.

- PI 537658 donor id: 1070. origin: United States. pedigree:
 Selected from PI 193474. other id: R7034-3. remarks:
 Primarily selected for high oil content. Oil content 62%.
 Pappus heavy. Breeding Material. Seed.
- PI 537659 donor id: 1072. origin: United States. pedigree:
 Selected from PI 283767. other id: R7069-2. remarks:
 Primarily selected for high oil content. Hulls yellowish to light tan (ltlt). Oil content 61%. Breeding Material.
 Seed.
- PI 537660 donor id: 1074. origin: United States. pedigree:
 Selected from PI 209281. other id: R7090-3. remarks:
 Primarily selected for low oil content. Oil content 41%.
 Breeding Material. Seed.
- PI 537661 donor id: 1075. origin: United States. pedigree:
 Selected from PI 292002. other id: R7092-4. remarks:
 Primarily selected for low oil content. Oil content 40%.
 Breeding Material. Seed.
- PI 537662 donor id: 1076. origin: United States. pedigree:
 Selected from Rio. other id: R7134-1. remarks:
 Primarily selected for low oil content. Hulls gray
 striped. Contains 2 recessive genes for gray striped
 hulls (stp g stp g). Oil content 39%. Breeding Material.
 Seed.
- PI 537663 donor id: 1079. origin: United States. pedigree:
 Selected from Gila. other id: R7131-2. remarks:
 Primarily selected for high protein content. Flowers
 orange. Protein content 40%. Breeding Material. Seed.
- PI 537664 donor id: 1080. origin: United States. pedigree:
 Selected from Carthamus oxycanthus (open pollinated).
 other id: R7186-2. remarks: Primarily selected for high protein content. Protein content 40%. Seeds black.
 Breeding Material. Seed.
- PI 537665 donor id: 1081. origin: United States. pedigree:
 Selected from Royal. other id: R7122-2. remarks:
 Primarily selected for high protein content. Flowers
 orange. Hulls purple striped. Contains 2 recessive genes
 for purple striped hulls (stp p stp p). Protein content
 40%. Breeding Material. Seed.
- PI 537666 donor id: 1082. origin: United States. pedigree:
 Selected from Royal. other id: R7126-1. remarks:
 Primarily selected for high protein content. Flowers orange. Hulls purple striped. Contains 2 recessive genes for purple striped hulls (stp p stp p). Protein content 40%. Breeding Material. Seed.

- PI 537667 donor id: 1084. origin: United States. pedigree:
 Selected from PI 250350. other id: R7044-1. remarks:
 Primarily selected for high protein content. Protein content 39%. Breeding Material. Seed.
- PI 537668 donor id: 1085. origin: United States. pedigree: Selected from Pac 7. other id: R7140-2. remarks: Primarily selected for low protein content. Protein content 21%. Breeding Material. Seed.
- PI 537669 donor id: 1086. origin: United States. pedigree:
 Selected from 5126. other id: R7146-7. remarks:
 Primarily selected for low protein content. Hulls brown striped (stp stp). Protein content 20% protein. Gila type with brown striped gene. Breeding Material. Seed.
- PI 537670 donor id: 1087. origin: United States. pedigree:
 Selected from PI 283786. other id: R7041-2. remarks:
 Primarily selected for low nitrogen-oil free extract
 (NOFE). NOFE 11%. Hulls yellowish to light tan (1tlt).
 Breeding Material. Seed.
- PI 537671 donor id: 1088. origin: United States. pedigree:
 Selected from PI 250595. other id: R7047-1. remarks:
 Primarily selected for low nitrogen-oil free extract
 (NOFE). NOFE 11%. Breeding Material. Seed.
- PI 537672 donor id: 1090. origin: United States. pedigree:
 Selected from PI 283759. other id: R7039-2. remarks:
 Primarily selected for low nitrogen-oil free extract
 (NOFE). NOFE 12%. Hulls yellowish to light tan (ltlt).
 Breeding Material. Seed.
- PI 537673 donor id: 1091. origin: United States. pedigree:
 Selected from PI 199925. other id: R7036-2. remarks:
 Primarily selected for low nitrogen-oil free extract
 (NOFE). NOFE 12%. Hulls yellowish to light tan (1tlt).
 Breeding Material. Seed.
- PI 537674 donor id: 1092. origin: United States. pedigree:
 Selected from PI 250342. other id: R7042-1. remarks:
 Primarily selected for low nitrogen-oil free extract
 (NOFE). NOFE 12%. Breeding Material. Seed.
- PI 537675 donor id: 1093. origin: United States. pedigree:
 Selected from S208. other id: R7135-5. remarks:
 Primarily selected for low nitrogen-oil free extract
 (NOFE). NOFE 13%. Breeding Material. Seed.

- PI 537676 donor id: 1094. origin: United States. pedigree:
 Selected from Royal. other id: R7120-1. remarks:
 Primarily selected for high nitrogen-oil free extract.
 (NOFE). NOFE 27%. Hulls purple striped. Contains 2 recessive genes for purple striped hulls (stp p stp p).
 Breeding Material. Seed.
- PI 537677 donor id: 1095. origin: United States. pedigree:
 Crossing and selection from Cathamus oxycantha type.
 other id: R5869. remarks: Primarily selected for early flowering. Breeding Material. Seed.
- PI 537678 donor id: 1097. origin: United States. pedigree: Selected from PI 248370. other id: R5999. remarks: Primarily selected for early flowering. Flowers red (sp2). Breeding Material. Seed.
- PI 537679 donor id: 1100. origin: United States. pedigree:
 Selected from PI 253559. other id: R4815. remarks:
 Primarily selected for early maturity. Flowers orange.
 Breeding Material. Seed.
- PI 537680 donor id: 1101. origin: United States. pedigree:
 Selected from PI 253559. other id: R4818. remarks:
 Primarily selected for early maturity. Flowers orange.
 Breeding Material. Seed.
- PI 537681 donor id: 1102. origin: United States. pedigree:
 Selected from PI 253564. other id: R4825. remarks:
 Primarily selected for early maturity. Flowers red.
 Breeding Material. Seed.
- PI 537682 donor id: 1104. origin: United States. pedigree: Seed of 380 open pollinated plants from Arizona wild composite (AWC). other id: R77-AWC-8818. remarks: Primarily selected for Phytophthera root rot resistance. Breeding Material. Seed.
- PI 537683 donor id: 1105. origin: United States. pedigree: Bulk of crosses and open pollinated plants from Arizona wild composite (AWC) surviving root rot selection pressure. other id: R78-AWC-1335. remarks: Primarily selected for Phytophthera root rot resistance. Breeding Material. Seed.
- PI 537684 donor id: 1106. origin: United States. pedigree: Bulk of crosses and open pollinated plants from Arizona wild composite (AWC) surviving root rot select pressure. other id: R79-AWC-1933. remarks: Primarily selected for Phytophthora root rot resistance. Breeding Material. Seed.

- PI 537685 donor id: 1107. origin: United States. pedigree: Bulk, open pollinated from 2964 and 2965 and bulk 2741-2958 plants of the Arizona Wild Composite (AWC). surviving root rot selection pressure. other id: R79-AWC-3741. remarks: Primarily selected for Phytophthora root rot resistance. Breeding Material. Seed.
- PI 537686 donor id: 1108. origin: United States. pedigree: Bulk, open pollinated of the Arizona Wild Composite (AWC), from nusery 3801-4178 plants surviving root rot selection pressure (nursery 95% kill). other id: R81-AWC-3801. remarks: Primarily selected for Phytophthora root rot resistance. Breeding Material. Seed.
- PI 537687 donor id: 1109. origin: United States. pedigree: Bulk, open pollinated from nursery 5201-5260 plants of the Arizona Wild Composite (AWC), surviving root rot selection pressure. other id: R82-AWC-5201. remarks: Primarily selected for Phytophthora root rot resistance. Breeding Material. Seed.
- PI 537688 donor id: 1110. origin: United States. pedigree: Bulk open pollinated plants from nursery 6301-6473, plants of the Arizona Wild Composite (AWC), surving root rot selection pressure. other id: R83-AWC-6301. remarks: Primarily selected for Phytophthora root rot resistance. Breeding Material. Seed.
- PI 537689 donor id: llll. origin: United States. pedigree: Bulk open pollinated plants from nursery 7661-7857, plants of the Arizona Wild Composite (AWC), surviving root rot selection pressure. other id: R84-AWC-7857. remarks: Primarily selected for Phytophthora root rot resistance. Breeding Material. Seed.
- PI 537690 donor id: 1112. origin: United States. pedigree: Bulk open pollinated plants of the Arizona Wild Composite (AWC) surviving root rot selection pressure. Selected in 1981 nursery, 95% survival in nursery with 95% kill. other id: R3812. remarks: Primarily selected for Phytophthora root rot resistance. Plants short. Maturity early. Flowers mostly red. Breeding Material. Seed.
- PI 537691 donor id: 1113. origin: United States. pedigree:
 Selection from nursery 9304-1 th /9328-1. other id:
 R9436. remarks: Primarily selected for lygus and thrip resistance. Flowers red. Breeding Material. Seed.
- PI 537692 donor id: 1114. origin: United States. cultivar: GILA. remarks: Flowers orange. Seeds white. Hulls smooth. Contains 2 dominant genes for smooth hulls (Stp Stp). Arizona released cultivar. Cultivar. Seed.

- PI 537693 donor id: 1115. origin: United States. cultivar: RIO. remarks: Flowers yellow. Hulls gray striped. Contains 2 recessive genes for gray striped hulls (stp g stp). Oil content higher than Gila. Arizona released cultivar (stp g stp g). Cultivar. Seed.
- PI 537694 donor id: 1116. origin: United States. cultivar: ROYAL. remarks: Flowers orange. Hulls purple striped. Contains 2 recessive genes for purple striped hulls (stp p stp p). Oil content higher than RIO. Arizona released cultivar. Cultivar. Seed.
- PI 537695 donor id: 1117. origin: United States. cultivar: OLE.

 pedigree: High oleic/*Royal. remarks: Flowers orange.

 Hulls purple striped. Contains 2 recessive genes for

 purple striped hulls (stp p stp p). Fatty acid

 composition of oil similar to olive oil. Arizona released

 cultivar. Cultivar. Seed.
- PI 537696 donor id: 1118. origin: United States. other id: N8. remarks: Flowers orange. Hulls gray striped. Contains 2 recessive genes for gray striped hulls (stp g stp g). Old Nebraska cultivar used as a susceptible check for rust. Cultivar. Seed.
- PI 537697 donor id: 1119. origin: United States. other id:
 R1286-5. remarks: Flowers orange. Hulls purple striped.
 Contains 2 recessive genes for purple striped hulls (stp p stp p). Closely related to cultivar Royal, seed more plump. Breeding Material. Seed.
- PI 537698 donor id: 1120. origin: United States. other id:
 R1286-6. remarks: Flowers orange. Hulls purple striped.
 Contains 2 recessive genes for purple striped hulls (stp p stp p). Closely related to cultivar Royal, but less hull and higher oil content. Breeding Material. Seed.
- PI 537699 donor id: 1121. origin: United States. pedigree:
 Royal/early. other id: R4239-19. remarks: Flowers
 orange. Hulls purple striped. Contains 2 recessive genes
 for purple striped hulls (stp p stp p). Seeds large.
 Breeding Material. Seed.
- PI 537700 donor id: 1122. origin: United States. pedigree:
 Selected from AC-2(Verticillium and thrip suceptibility similar to Royal. other id: R6167. remarks: Flowers orange. Hulls purple striped. Contains 2 recessive genes for purple striped hulls (stp p stp p). Breeding Material. Seed.

- PI 537701 donor id: 1123. origin: United States. pedigree:
 Selected from Saffola 208. other id: R6208. remarks:
 Flowers orange. Hulls gray striped. Contains 2 recessive genes for gray striped hulls (stp g stp g). Breeding Material. Seed.
- PI 537702 donor id: 1124. origin: United States. pedigree:
 Selected from Hartman. other id: R6953. remarks:
 Flowers yellow. Hulls purple striped. Contains 2
 recessive genes for purple striped hulls (stp p stp p),
 resulting in higher oil content than 1123(PI 1040). Lygus
 bug resistant. Breeding Material. Seed.
- PI 537703 donor id: 1125. origin: United States. pedigree: From th, stp p (5411-17 x sp o, 8990-1), 8865-1 spineless. other id: R5118. remarks: Primarily selected as a female hybrid. Flowers orange and thin. Hulls gray striped. Contains 2 recessive genes for thin hulls (thth) and 2 recessive genes for gray striped hulls (stp g stp g). Thin hull types mainly self sterile. Pollen does not extend to end of pollen tube. Useful in hybridization (reduced selfing). Plants spineless. Lygus bug resistant. (from th stp p). Breeding Material. Seed.
- PI 537704 donor id: 1126. origin: United States. pedigree: From th stp 2 (5411-17 x sp o 8990-1),8867-1 spineless. other id: R5119. remarks: Primarily selected as a female hybrid. Flowers orange and thin. Hulls purple striped. Contains 2 recessive genes for thin hulls (thth) and 2 recessive genes for purple striped hulls (stp p stp p). Plants spineless. Lygus bug resistant. Breeding Material. Seed.
- PI 537705 donor id: 1127. origin: United States. pedigree: 6644-1//A106/1139-9. other id: R6541. remarks: Primarily selected as a female hybrid. Flowers orange and thin. Hulls gray striped. Contains 2 recessive genes for thin hulls (thth) and 2 recessive genes for gray striped hulls (stp g stp g). Lygus bug resistant. Breeding Material. Seed.
- PI 537706 donor id: 1128. origin: United States. other id:
 R2493-12. remarks: Primarily selected as a female
 hybrid. Flowers orange and thin. Hulls purple striped.
 Contains 2 recessive genes for thin hulls (thth) and 2
 recessive genes for purple striped hulls (stp p stp p).
 Crossibility 95%. Medium resistance to Lygus bugs.
 Breeding Material. Seed.

- PI 537707 donor id: 1129. origin: United States. other id:
 R2493-16. remarks: Primarily selected as a female
 hybrid. Flowers orange and thin. Hulls purple striped.
 Contains 2 recessive genes for thin hulls (thth) and 2
 recessive genes for purple striped hulls (stp p stp p).
 Crossibility 85%. Medium resistance to Lygus bugs.
 Breeding Material. Seed.
- PI 537708 donor id: 1130. origin: United States. other id:
 R2495-13. remarks: Primarily selected as a female
 hybrid. Flowers orange and thin. Hulls purple striped.
 Contains 2 recessive genes for thin hulls (thth) and 2
 recessive genes for purple striped hulls (stp p stp p).
 Crossibility 80%. Medium resistance to Lygus bugs.
 Breeding Material. Seed.
- PI 537709 donor id: 1136. origin: United States. other id: R7360. remarks: Primarily selected as a oleic type. Hulls brown striped yellowish to light tan. Inner hulls light. Contains 2 recessive genes for brown stiped hulls (stp stp) and 2 recessive genes for light hulls (lt lt). Oleic type. Breeding Material. Seed.
- PI 537710 donor id: 1137. origin: United States. other id: R9539. remarks: Primarily selected as a oleic type. Hulls gray striped yellowish to light tan. Inner hulls light. Contains 2 recessive genes for gray striped hulls (stp g stp g) and 2 recessive genes for light hulls (ltlt). Oleic type. Breeding Material. Seed.
- PI 537711 donor id: 1138. origin: United States. pedigree:
 Derived from backcrossing white flower color to Ole.
 other id: R6257. remarks: Primarily selected as a oleic
 type. Flowers white. Hulls purple striped. Contains 2
 recessive genes for purple striped hulls (stp p stp p).
 Oleic type. Breeding Material. Seed.
- PI 537712 donor id: 1139. origin: United States. pedigree:
 Derived from backcrossing white flower color to Ole.
 other id: R6261. remarks: Primarily selected as a oleic
 type. Flowers white. Hulls purple striped. Contains 2
 recessive genes for purple striped hulls (stp p stp p).
 Oleic type. Breeding Material. Seed.
- PI 537713. Lupinus angustifolius L. FABACEAE Blue lupine

Donated by: Forbes, I., USDA-ARS, Georgia Coastal Plains Exp. Sta., P.O. Box 948, Tifton, Georgia, United States. remarks: Released in February 1960. Received March 01, 1990.

origin: United States. cultivar: BLANCO. pedigree: WFB/Borre (sweet blue lupine). other id: CV-1. source: Crop Sci. 4(4):448 1964. group: CSR-LUPINE. remarks: Forage cultivar with good late wintering and early spring grazing in Georgia and Northern Florida and sweet taste. Flowers and seed coats white. Stem and leaves bright green without purple pigment (characteristic of bitter lupine). Perennial. Cultivar. Seed.

- PI 537714 to 537966. Sorghum bicolor (L.) Moench POACEAE Sorghum
 - Donated by: Voigt, R.L., University of Arizona, USAID Sorghum/Millet Program, Tucson, Arizona, United States; and El Lakany, M.A., Field Crop Division, UN Development Progran, FAO, Taiz, Yemen Arab Republic. Received December 01, 1989.
 - PI 537714 donor id: 825. origin: Yemen Arab Republic. locality:
 Ibb. elevation: 2000m. remarks: Race Caudatum kafir.
 Head type 4 semi-open, elongated, elliptical. Seeds
 light brown. Cultivated. Seed.
 - PI 537715 donor id: 985. origin: Yemen Arab Republic. locality:

 Dhamar road. elevation: 2450m. remarks: Race Durra
 caudatum. Head type 7 very compact, ovate, flattened
 base with usually a recurved peduncle. Seeds light brown.
 Cultivated. Seed.
 - PI 537716 donor id: 1030. origin: Yemen Arab Republic. locality:
 Rusaba. elevation: 2400m. remarks: Race Caudatum
 durra. Head type 4 semi-open, elongated, elliptical.
 Seeds light brown. Cultivated. Seed.
 - PI 537717 donor id: 1339. origin: Yemen Arab Republic. locality: Ibb. elevation: 2000m. remarks: Race Durra kafir. Head type 4 semi-open, elongated, elliptical. Seeds light brown. Cultivated. Seed.
 - PI 537718 donor id: 1348. origin: Yemen Arab Republic. locality: Ibb. elevation: 2000m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated, elliptical. Seeds orange. Cultivated. Seed.
 - PI 537719 donor id: 1370. origin: Yemen Arab Republic. locality:
 Khiyar Sn-Sd road. elevation: 2400m. remarks: Race Durra kafir. Head type 7 Very compact, ovate, flattened
 base with usually a recurved peduncle. Seeds white.
 Cultivated. Seed.

- PI 537720 donor id: 1432. origin: Yemen Arab Republic. locality: Ibb. elevation: 2000m. remarks: Race Durra kafir. Head type 5 Semi-compact ovate. Seeds yellow. Cultivated. Seed.
- PI 537721 donor id: 1491. origin: Yemen Arab Republic. locality: Ibb Udayn road. elevation: 2000m. remarks: Race Bicolor durra. Head type 3 open elongated, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 537722 donor id: 1559. origin: Yemen Arab Republic. locality:
 Turba. elevation: 2000m. remarks: Race Kafir
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seeds tan. Cultivated. Seed.
- PI 537723 donor id: 1573. origin: Yemen Arab Republic. locality:
 Turba. elevation: 2000m. remarks: Race Kafir
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seeds tan. Cultivated. Seed.
- PI 537724 donor id: 1616. origin: Yemen Arab Republic. locality:
 Begel. elevation: 190m. remarks: Race Caudatum
 kafir. Head type 4 semi-open, elongated, elliptical.
 Seeds light orange. Cultivated. Seed.
- PI 537725 donor id: 1640. origin: Yemen Arab Republic. locality: Dahana. elevation: 185m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated, elliptical. Seeds tan. Cultivated. Seed.
- PI 537726 donor id: 1650. origin: Yemen Arab Republic. locality:
 Al Hagaheg. elevation: 185m. remarks: Race Durra
 kafir. Head type 4 semi-open, elongated, elliptical.
 Seeds light orange. Cultivated. Seed.
- PI 537727 donor id: 1757. origin: Yemen Arab Republic. locality:
 Al Naseri. elevation: 220m. remarks: Race Kafir
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seeds light orange. Cultivated. Seed.
- PI 537728 donor id: 2240. origin: Yemen Arab Republic. locality:
 Al Sarrah. elevation: 170m. remarks: Race Kafir.
 Head type 4 semi-open, elongated, elliptical. Seeds
 white. Cultivated. Seed.
- PI 537729 donor id: 2258. origin: Yemen Arab Republic. locality:
 Al Sarrah. elevation: 170m. remarks: Race Caudatum
 kafir. Head type 4 semi-open, elongated, elliptical.
 Seeds orange. Cultivated. Seed.

- PI 537730 donor id: 2489. origin: Yemen Arab Republic. locality:
 Kohre. elevation: 200m. remarks: Race Durra kafir.
 Head type 5 semi-compact, ovate. Seeds light orange.
 Cultivated. Seed.
- PI 537731 donor id: 2524. origin: Yemen Arab Republic. locality: Kohre. elevation: 200m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seeds light orange. Cultivated. Seed.
- PI 537732 donor id: 2550. origin: Yemen Arab Republic. locality:
 Al Himeh. elevation: 1620m. remarks: Race Bicolor.
 Head type 3 open, elongated, elliptical. Seeds light
 yellow. Cultivated. Seed.
- PI 537733 donor id: 2554. origin: Yemen Arab Republic. locality:
 Bene Manssor. elevation: 1520m. remarks: Race Durra
 kafir. Head type 6 semi-compact, elliptical. Seeds
 yellow-orange. Cultivated. Seed.
- PI 537734 donor id: 2561. origin: Yemen Arab Republic. locality:
 Bene Manssor. elevation: 1520m. remarks: Race Caudatum kafir. Head type 4 semi-open, elongated,
 elliptical. Seeds light orange. Cultivated. Seed.
- PI 537735 donor id: 2632. origin: Yemen Arab Republic. locality:
 Bakel. elevation: 1140m. remarks: Race Caudatum. Head
 type 4 semi-open, elongated, elliptical. Seeds light
 orange. Cultivated. Seed.
- PI 537736 donor id: 2662. origin: Yemen Arab Republic. locality:
 Mahal Alotome. elevation: 580m. remarks: Race Kafir
 durra. Head type 6 semi-compact, elliptical. Seeds
 light yellow. Cultivated. Seed.
- PI 537737 donor id: 2663. origin: Yemen Arab Republic. locality:
 Mahal Alotome. elevation: 580m. remarks: Race Kafir
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seeds white. Cultivated. Seed.
- PI 537738 donor id: 2667. origin: Yemen Arab Republic. locality:
 Mahal Alotome. elevation: 580m. remarks: Race Caudatum. Head type 4 semi-open, elongated, elliptical.
 Seeds light orange. Cultivated. Seed.
- PI 537739 donor id: 2674. origin: Yemen Arab Republic. locality:
 Bait Alhijah. elevation: 590m. remarks: Race Kafir
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seeds white. Cultivated. Seed.

- PI 537740 donor id: 2675. origin: Yemen Arab Republic. locality:
 Bait Alhijah. elevation: 590m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seeds light orange. Cultivated. Seed.
- PI 537741 donor id: 2685. origin: Yemen Arab Republic. locality:
 Karit Alkafleh. elevation: 650m. remarks: Race Kafir
 durra. Head type 4 semi-open, elongated, elliptical.
 Seeds light orange. Cultivated. Seed.
- PI 537742 donor id: 2704. origin: Yemen Arab Republic. locality:
 Altig Mahwit. elevation: 730m. remarks: Race Kafir
 durra. Head type 4 semi-open, elongated, elliptical.
 Seeds yellow white. Cultivated. Seed.
- PI 537743 donor id: 2830. origin: Yemen Arab Republic. locality:
 Almahwit Sirah. elevation: 1010m. remarks: Race Caudatum. Head type 4 semi-open, elongated, elliptical.
 Seeds light orange. Cultivated. Seed.
- PI 537744 donor id: 2846. origin: Yemen Arab Republic. locality:
 Almahwit Sirah. elevation: 1040m. remarks: Race Caudatum durra. Head type 3 open, elongated,
 elliptical. Seeds light orange. Cultivated. Seed.
- PI 537745 donor id: 2871. origin: Yemen Arab Republic. locality:
 Almahwit Sirah. elevation: 1045m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seeds light
 brown. Cultivated. Seed.
- PI 537746 donor id: 2906. origin: Yemen Arab Republic. locality:
 Almahwit Al Koulah. elevation: 880m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seeds
 white. Cultivated. Seed.
- PI 537747 donor id: 2921. origin: Yemen Arab Republic. locality:
 Almahwit Al Kata'a. elevation: 880m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seeds
 white. Cultivated. Seed.
- PI 537748 donor id: 2997. origin: Yemen Arab Republic. locality:
 Almahwit Al Arkoob. elevation: 1345m. remarks: Race Caudatum. Head type 4 semi-open, elongated, elliptical.
 Seeds yellow-white. Cultivated. Seed.
- PI 537749 donor id: 3007. origin: Yemen Arab Republic. locality: Al Kerow. elevation: 1345m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seeds white. Cultivated. Seed.

- PI 537750 donor id: 3017. origin: Yemen Arab Republic. locality:
 Al Arkoob. elevation: 1345m. remarks: Race Durra
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seeds light red. Cultivated. Seed.
- PI 537751 donor id: 3040. origin: Yemen Arab Republic. locality:
 Almahwit Al Shahidee. elevation: 1380m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seeds brown. Cultivated. Seed.
- PI 537752 donor id: 3050. origin: Yemen Arab Republic. locality:
 Al Shahedy. elevation: 1380m. remarks: Race Durra
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seeds light tan. Cultivated. Seed.
- PI 537753 donor id: 3063. origin: Yemen Arab Republic. locality:
 Al Shahedy. elevation: 1355m. remarks: Race Caudatum
 durra. Head type 7 very compact, ovate, flattened base
 with usually a recurved peduncle. Seeds tan. Cultivated.
 Seed.
- PI 537754 donor id: 3074. origin: Yemen Arab Republic. locality:
 Al Reidah. elevation: 1355m. remarks: Race Bicolor
 caudatum. Head type 5 semi-compact, ovate. Seeds white.
 Cultivated. Seed.
- PI 537755 donor id: 3076. origin: Yemen Arab Republic. locality:
 Al Reidah. elevation: 1355m. remarks: Race Caudatum
 bicolor. Head type 4 semi-open, elongated, elliptical.
 Seeds white. Cultivated. Seed.
- PI 537756 donor id: 3094. origin: Yemen Arab Republic. locality:
 Mahal Al Karun. elevation: 1530m. remarks: Race Kafir
 Guinea. Head type 4 semi-open, elongated, Seeds
 yellow-tan. Cultivated. Seed.
- PI 537757 donor id: 3103. origin: Yemen Arab Republic. locality:
 Al Reidah. elevation: 1355m. remarks: Race Caudatum.
 Head type 4 semi-open, elongated, Seeds white.
 Cultivated. Seed.
- PI 537758 donor id: 3138. origin: Yemen Arab Republic. locality:
 Mahal Noman. elevation: 1660m. remarks: Race Caudatum
 durra. Head type 6 semi-compact, elliptical. Seeds
 white. Cultivated. Seed.
- PI 537759 donor id: 3160. origin: Yemen Arab Republic. locality:
 Akabat. elevation: 1670m. remarks: Race Kafir
 caudatum. Head type 5 semi-compact, ovate. Seeds light
 orange. Cultivated. Seed.

- PI 537760 donor id: 3177. origin: Yemen Arab Republic. locality:
 Bait Sahidi. elevation: 1430m. remarks: Race Durra
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seeds white. Cultivated. Seed.
- PI 537761 donor id: 3200. origin: Yemen Arab Republic. locality:
 Aabar Al Hajar. elevation: 1380m. remarks: Race Durra
 bicolor. Head type 3 open, elongated, elliptical. Seeds
 light yellow. Cultivated. Seed.
- PI 537762 donor id: 3204. origin: Yemen Arab Republic. locality:
 Aabar Al Hajar. elevation: 1360m. remarks: Race Caudatum bicolor. Head type 3 open, elongated,
 elliptical. Seeds light yellow. Cultivated. Seed.
- PI 537763 donor id: 3222. origin: Yemen Arab Republic. locality:
 Aaber Al Hajar. elevation: 1360m. remarks: Race Caudatum bicolor. Head type 3 open, elongated,
 elliptical. Seeds tan. Cultivated. Seed.
- PI 537764 donor id: 3232. origin: Yemen Arab Republic. locality: Wadi Amran. elevation: 1360m. remarks: Race Kafir caudatum. Head type 3 open, elongated, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 537765 donor id: 3244. origin: Yemen Arab Republic. locality:
 Al Balad. elevation: 1360m. remarks: Race Durra
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seeds white. Cultivated. Seed.
- PI 537766 donor id: 3277. origin: Yemen Arab Republic. locality:
 Mahal Al Redah. elevation: 1380m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seeds white. Cultivated. Seed.
- PI 537767 donor id: 3303. origin: Yemen Arab Republic. locality:
 Al Kadan. elevation: 1340m. remarks: Race Guinea.
 Head type 4 sem-open, elongated, elliptical. Seeds
 light yellow. Cultivated. Seed.
- PI 537768 donor id: 3316. origin: Yemen Arab Republic. locality: Wadi Amran. elevation: 1355m. remarks: Race Kafir. Head tyoe 4 semi-open, elongated, elliptical. Seeds yellow. Cultivated. Seed.
- PI 537769 donor id: 3337. origin: Yemen Arab Republic. locality:
 Mahal Al Redah. elevation: 1380m. remarks: Race Durra
 caudatum. Head type 7 very compact, ovate, flattened
 base with usually a recurved peduncle. Seeds tan.
 Cultivated. Seed.

- PI 537770 donor id: 3341. origin: Yemen Arab Republic. locality:
 Mahal Al Redah. elevation: 1380m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seeds
 white. Cultivated. Seed.
- PI 537771 donor id: 3364. origin: Yemen Arab Republic. locality:
 Al Arkoob. elevation: 1390m. remarks: Race Durra
 caudatum. Head type 4 Semi-open, elongated, elliptical.
 Seeds white. Cultivated. Seed.
- PI 537772 donor id: 3371. origin: Yemen Arab Republic. locality:
 Al Arkoob. elevation: 1390m. remarks: Race Caudatum
 durra. Head type 4 semi-open, elongated, elliptical.
 Seeds white. Cultivated. Seed.
- PI 537773 donor id: 3374. origin: Yemen Arab Republic. locality:
 Al Arkoob. elevation: 1390m. remarks: Race Caudatum
 durra. Head type 4 semi-open, elongated, elliptical.
 Seeds white. Cultivated. Seed.
- PI 537774 donor id: 3410. origin: Yemen Arab Republic. locality:
 Bayt Abdo Ali. elevation: 1180m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seeds gray and light yellow. Cultivated.
 Seed.
- PI 537775 donor id: 3427. origin: Yemen Arab Republic. locality:
 Bayt Abdo Ali. elevation: 1240m. remarks: Race Durra
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seeds light tan. Cultivated. Seed.
- PI 537776 donor id: 3436. origin: Yemen Arab Republic. locality:
 Bayt Abdo Ali. elevation: 1240m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seeds tan. Cultivated. Seed.
- PI 537777 donor id: 3459. origin: Yemen Arab Republic. locality:
 Bayt Abdo Ali. elevation: 1050m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seeds white and light brown. Cultivated.
 Seed.
- PI 537778 donor id: 3471. origin: Yemen Arab Republic. locality:
 Bayt Abdo Ali. elevation: 1050m. remarks: Race Durra
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seeds tan. Cultivated. Seed.
- PI 537779 donor id: 3472. origin: Yemen Arab Republic. locality:
 Bayt Abdo Ali. elevation: 1050m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seeds white.
 Cultivated. Seed.

- PI 537780 donor id: 3480. origin: Yemen Arab Republic. locality:
 Bayt Lahmy. elevation: 875m. remarks: Race Caudatum
 durra. Head type 4 semi-open, elongated, elliptical.
 Seeds white and brown. Cultivated. Seed.
- PI 537781 donor id: 3498. origin: Yemen Arab Republic. locality:
 Bayt Lahmy. elevation: 875m. remarks: Race Caudatum
 durra. Head type 5 semi-compact, ovate. Seeds white.
 Cultivated. Seed.
- PI 537782 donor id: 3542. origin: Yemen Arab Republic. locality:
 Bayt Abdo Ali. elevation: l180m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seeds white and red. Cultivated. Seed.
- PI 537783 donor id: 3544. origin: Yemen Arab Republic. locality:
 Bayt Abdo Ali. elevation: 1180m. remarks: Race Durra
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seeds light brown. Cultivated. Seed.
- PI 537784 donor id: 3548. origin: Yemen Arab Republic. locality:
 Damar. elevation: 1480m. remarks: Race Caudatum
 durra. Head type 7 very compact, ovate, flattened base
 with usually a recurved peduncle. Seeds brown.
 Cultivated. Seed.
- PI 537785 donor id: 3549. origin: Yemen Arab Republic. locality:
 Damar. elevation: 1480m. remarks: Race Caudatum
 durra. Head type 7 very compact, ovate, flattened base
 with usually a recurved peduncle. Seeds brown.
 Cultivated. Seed.
- PI 537786 donor id: 3567. origin: Yemen Arab Republic. locality:
 Damar Al Falkah. elevation: 2520m. remarks: Race Durra Caudatum. Head type 7 very compact, ovate,
 flattened base with usually a recurved peduncle. Seeds
 brown. Cultivated. Seed.
- PI 537787 donor id: 3589. origin: Yemen Arab Republic. locality:
 Damar Al Kadah. elevation: 2540m. remarks: Race Durra
 Caudatum. Head type 7 very compact, ovate, flattened
 base with usually a recurved peduncle. Seeds brown.
 Cultivated. Seed.
- PI 537788 donor id: 3611. origin: Yemen Arab Republic. locality:
 Damar Al Sowyda. elevation: 2470m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds light yellow. Cultivated. Seed.

- PI 537789 donor id: 3621. origin: Yemen Arab Republic. locality:
 Damar. elevation: 2450m. remarks: Race Durra. Head
 type 6 semi-compact, elliptical. Seeds yellow.
 Cultivated. Seed.
- PI 537790 donor id: 3624. origin: Yemen Arab Republic. locality:
 Damar. elevation: 2450m. remarks: Race Durra. Head
 type 6 semi-compact, elliptical. Seeds yellow.
 Cultivated. Seed.
- PI 537791 donor id: 3637. origin: Yemen Arab Republic. locality:
 Al Kawlah. elevation: 2470m. remarks: Race Durra.
 Head type 7 very compact, ovate, flattened base with usually a recurved peduncle. Seeds yellow. Cultivated.
 Seed.
- PI 537792 donor id: 3656. origin: Yemen Arab Republic. locality:
 Damar Al Hamad. elevation: 2230m. remarks: Race Durra
 caudatum. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537793 donor id: 3672. origin: Yemen Arab Republic. locality:
 Damar Al Fukah. elevation: 2300m. remarks: Race Durra
 caudatum. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537794 donor id: 3692. origin: Yemen Arab Republic. locality:
 Damar Rada. elevation: 2170m. remarks: Race Durra
 kafir. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537795 donor id: 3698. origin: Yemen Arab Republic. locality:
 Damar Shareh. elevation: 2050m. remarks: Race Durra
 kafir. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537796 donor id: 3709. origin: Yemen Arab Republic. locality:
 Damar Abais. elevation: 2110m. remarks: Race Durra.
 Head type 6 semi-compact. elliptical. Seeds yellow.
 Cultivated. Seed.
- PI 537797 donor id: 3715. origin: Yemen Arab Republic. locality:
 Damar Abais. elevation: 2190m. remarks: Race Durra
 kafir. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537798 donor id: 3733. origin: Yemen Arab Republic. locality:
 Damar Rada. elevation: 2170m. remarks: Race Durra
 kafir. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.

- PI 537799 donor id: 3735. origin: Yemen Arab Republic. locality:
 Damar Rada. elevation: 2170m. remarks: Race Durra
 kafir. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537800 donor id: 3747. origin: Yemen Arab Republic. locality:
 Damar Mashrayah. elevation: 2050m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537801 donor id: 3752. origin: Yemen Arab Republic. locality:
 Damar Sharyah. elevation: 2050m. remarks: Race Durra
 kafir. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537802 donor id: 3754. origin: Yemen Arab Republic. locality:
 Damar Alsbelah. elevation: 2050m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537803 donor id: 3762. origin: Yemen Arab Republic. locality:
 Damar Rada Al Kahir. elevation: 2000m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537804 donor id: 3764. origin: Yemen Arab Republic. locality:
 Damar Rada Al Kahir. elevation: 2000m. remarks: Race Durra caudatum. Head type 4 semi-open, elongated,
 elliptical. Seeds light red. Cultivated. Seed.
- PI 537805 donor id: 3767. origin: Yemen Arab Republic. locality:
 Damar Al Kahir. elevation: 2000m. remarks: Race Kafir
 durra. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537806 donor id: 3771. origin: Yemen Arab Republic. locality:
 Damar Al Kahir. elevation: 2000m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 537807 donor id: 3774. origin: Yemen Arab Republic. locality:
 Damar Al Kahir. elevation: 2000m. remarks: Race Durra kafir. Head type 7 very compact, ovate, fattened base with usually a recurved peduncle. Seeds yellow.
 Cultivated. Seed.
- PI 537808 donor id: 3775. origin: Yemen Arab Republic. locality:
 Damar Al Kahir. elevation: 2000m. remarks: Race Durra
 kafir. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.

- PI 537809 donor id: 3776. origin: Yemen Arab Republic. locality:
 Damar Al Kahir. elevation: 2000m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 537810 donor id: 3777. origin: Yemen Arab Republic. locality:
 Damar Al Kahir. elevation: 2000m. remarks: Race Durra kafir. Head type 7 very compact, ovate, flattened base with usually a recurved peduncle. Seeds yellow.
 Cultivated. Seed.
- PI 537811 donor id: 3786. origin: Yemen Arab Republic. locality:
 Damar Al Kahir. elevation: 2000m. remarks: Race Durra
 caudatum. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537812 donor id: 3787. origin: Yemen Arab Republic. locality:
 Damar Al Kahir. elevation: 2000m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base with usually a recurved peduncle. Seeds yellow.
 Cultivated. Seed.
- PI 537813 donor id: 3789. origin: Yemen Arab Republic. locality:
 Damar Al Kahir. elevation: 2000m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base with usually a recurved peduncle. Seeds yellow.
 Cultivated. Seed.
- PI 537814 donor id: 3791. origin: Yemen Arab Republic. locality:
 Damar Al Kahir. elevation: 2000m. remarks: Race Durra
 caudatum. Head type 7 very compact, ovate, flattened
 base with usually a recurved peduncle. Seeds yellow
 orange. Cultivated. Seed.
- PI 537815 donor id: 3794. origin: Yemen Arab Republic. locality:
 Damar Al Kahir. elevation: 2000m. remarks: Race Durra
 caudatum. Head type 6 semi-compact, elliptical. Seeds
 light red. Cultivated. Seed.
- PI 537816 donor id: 3816. origin: Yemen Arab Republic. locality:
 Damar Aswed. elevation: 1990m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537817 donor id: 3817. origin: Yemen Arab Republic. locality:
 Damar Aswed. elevation: 1990m. remarks: Race Durra.
 Head type 5 semi-compact, ovate. Seeds yellow.
 Cultivated. Seed.

- PI 537818 donor id: 3824. origin: Yemen Arab Republic. locality:
 Damar. elevation: 2470m. remarks: Race Kafir durra.
 Head type 6 semi-compact, elliptical. Seeds yellow.
 Cultivated. Seed.
- PI 537819 donor id: 3825. origin: Yemen Arab Republic. locality:
 Damar. elevation: 1990m. remarks: Race Durra
 caudatum. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537820 donor id: 3826. origin: Yemen Arab Republic. locality:
 Damar Al Smed. elevation: 1990m. remarks: Race Durra
 caudatum. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537821 donor id: 3830. origin: Yemen Arab Republic. locality:
 Damar Mansam. elevation: 2170m. remarks: Race Durra
 caudatum. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537822 donor id: 3831. origin: Yemen Arab Republic. locality:
 Damar Mansam. elevation: 2170m. remarks: Race Durra.
 Head type 6 semi-compact, elliptical. Seeds yellow.
 Cultivated. Seed.
- PI 537823 donor id: 3836. origin: Yemen Arab Republic. locality:
 Damar Al Swed. elevation: 1990m. remarks: Race Durra.
 Head type 7 very compact, ovate, flattened base with
 usually a recurved peduncle. Seeds yellow. Cultivated.
 Seed.
- PI 537824 donor id: 3838. origin: Yemen Arab Republic. locality:
 Damar Al Swed. elevation: 1990m. remarks: Race Durra.
 Head type 6 semi-compact, elliptical. Seeds yellow.
 Cultivated. Seed.
- PI 537825 donor id: 3846. origin: Yemen Arab Republic. locality:
 Damar Mansam. elevation: 1990m. remarks: Race Kafir
 durra. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537826 donor id: 3851. origin: Yemen Arab Republic. locality:
 Al Bayda Abass. elevation: 1980m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537827 donor id: 3854. origin: Yemen Arab Republic. locality:
 Al Bayda Abass. elevation: 1980m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.

- PI 537828 donor id: 3857. origin: Yemen Arab Republic. locality:
 Al Bayda Abass. elevation: 1980m. remarks: Race Durra
 kafir. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537829 donor id: 3858. origin: Yemen Arab Republic. locality:
 Al Bayda Abass. elevation: 1980m. remarks: Race Kafir
 durra. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537830 donor id: 3861. origin: Yemen Arab Republic. locality:
 Al Bayda Abass. elevation: 1980m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 537831 donor id: 3864. origin: Yemen Arab Republic. locality:
 Al Bayda Abass. elevation: 1980m. remarks: Race Durra
 kafir. Head type 7 very compact, ovate, flattened base
 with usually a recurved peduncle. Seeds yellow.
 Cultivated. Seed.
- PI 537832 donor id: 3866. origin: Yemen Arab Republic. locality:
 Al Bayda Abass. elevation: 1980m. remarks: Race Durra
 kafir. Head type 7 very compact, ovate, flattened base
 with usually a recurved peduncle. Seeds yellow.
 Cultivated. Seed.
- PI 537833 donor id: 3869. origin: Yemen Arab Republic. locality:
 Al Bayda Al Swadyah. elevation: 2030m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537834 donor id: 3873. origin: Yemen Arab Republic. locality:
 Al Bayda the Nassem. elevation: 2125m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537835 donor id: 3876. origin: Yemen Arab Republic. locality:
 Albayda Alkooh Alkayah. elevation: 2220m. remarks: Race
 Durra kafir. Head type 4 semi-open, elongated,
 elliptical. Seeds yellow. Cultivated. Seed.
- PI 537836 donor id: 3884. origin: Yemen Arab Republic. locality:
 Al Bayda Abass. elevation: 1980m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seeds yellow. Cultivated. Seed.
- PI 537837 donor id: 3885. origin: Yemen Arab Republic. locality:
 Al Bayda Abass. elevation: 1980m. remarks: Race Kafir
 durra. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.

- PI 537838 donor id: 3897. origin: Yemen Arab Republic. locality:
 Al Bayda Abass. elevation: 1980m. remarks: Race Durra
 kafir. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537839 donor id: 3898. origin: Yemen Arab Republic. locality:
 Al Bayda. elevation: 1980m. remarks: Race Durra
 kafir. Head type 7 very compact, ovate, flattened base
 with usually a recurved peduncle. Seeds yellow.
 Cultivated. Seed.
- PI 537840 donor id: 3900. origin: Yemen Arab Republic. locality:
 Al Bayda Abass. elevation: 1980m. remarks: Race Durra
 kafir. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537841 donor id: 3904. origin: Yemen Arab Republic. locality:
 Al Bayda Al Swadyah. elevation: 2030m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537842 donor id: 3907. origin: Yemen Arab Republic. locality:
 Al Bayda Al Swadyah. elevation: 2030m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537843 donor id: 3916. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2010m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537844 donor id: 3919. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2010m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537845 donor id: 3921. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2010m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537846 donor id: 3922. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2010m. remarks: Race Durra kafir. Head type 7 very compact, ovate, flattened
 base with usually a recurved peduncle. Seeds yellow.
 Cultivated. Seed.
- PI 537847 donor id: 3929. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2010m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.

- PI 537848 donor id: 3931. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2010m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537849 donor id: 3932. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2010m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537850 donor id: 3934. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2010m. remarks: Race Durra kafir. Head type 7 very compact, ovate,
 flattened base with usually a recurved peduncle. Seeds
 yellow. Cultivated. Seed.
- PI 537851 donor id: 3941. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2030m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537852 donor id: 3942. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2030m. remarks: Race Kafir durra. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537853 donor id: 3952. origin: Yemen Arab Republic. locality:
 Al Bayda Al Kohah. elevation: 2020m. remarks: Race Durra caudatum. Head type 4 semi-open, elongated,
 elliptical. Seeds light orange. Cultivated. Seed.
- PI 537854 donor id: 3966. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2030m. remarks: Race Durra kafir. Head type 7 very compact, ovate, flattened
 base with usually a recurved peduncle. Seeds yellow.
 Cultivated. Seed.
- PI 537855 donor id: 3967. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2030m. remarks: Race Kafir. Head type 6 semi-compact, elliptical. Seeds
 yellow. Cultivated. Seed.
- PI 537856 donor id: 3968. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2030m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537857 donor id: 3971. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2000m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.

- PI 537858 donor id: 3974. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2000m. remarks: Race Durra kafir. Head type 7 very compact, ovate, flattened
 base with usually a recurved peduncle. Seeds yellow.
 Cultivated. Seed.
- PI 537859 donor id: 3978. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2000m. remarks: Race Kafir durra. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537860 donor id: 3979. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2000m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537861 donor id: 3982. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2000m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537862 donor id: 3983. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2000m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537863 donor id: 3985. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2030m. remarks: Race Kafir durra. Head type 4 semi-open, elongated,
 elliptical. Seeds yellow. Cultivated. Seed.
- PI 537864 donor id: 3996. origin: Yemen Arab Republic. locality:
 Al Bayda Shareh. elevation: 1980m. remarks: Race Kafir durra. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537865 donor id: 3999. origin: Yemen Arab Republic. locality:
 Al Bayda Al Hakil. elevation: 1980m. remarks: Race Kafir caudatum. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537866 donor id: 4003. origin: Yemen Arab Republic. locality:
 Al Bayda Al Hakil. elevation: 1980m. remarks: Race Caudatum. Head type 5 semi-compact, ovate. Seeds light orange. Cultivated. Seed.
- PI 537867 donor id: 4009. origin: Yemen Arab Republic. locality:
 Al Bayda Halsah. elevation: 1970m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.

- PI 537868 donor id: 4015. origin: Yemen Arab Republic. locality:
 Al Bayda Halsah. elevation: 1970m. remarks: Race Kafir durra. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537869 donor id: 4028. origin: Yemen Arab Republic. locality:
 Al Bayda Farekah. elevation: 1945m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537870 donor id: 4032. origin: Yemen Arab Republic. locality:
 Al Bayda Farekah. elevation: 1945m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537871 donor id: 4034. origin: Yemen Arab Republic. locality:
 Al Bayda Masydah. elevation: 1970m. remarks: Race Kafir caudatum. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537872 donor id: 4037. origin: Yemen Arab Republic. locality:
 Al Bayda Koraythah. elevation: 1945m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537873 donor id: 4051. origin: Yemen Arab Republic. locality:
 Al Bayda Mosrah Mosreahm. elevation: 1970m. remarks:
 Race Caudatum kafir. Head type 6 semi-compact,
 elliptical. Seeds yellow. Cultivated. Seed.
- PI 537874 donor id: 4054. origin: Yemen Arab Republic. locality:
 Al Bayda Mosrah Mosreahm. elevation: 1970m. remarks:
 Race Caudatum kafir. Head type 6 semi-compact,
 elliptical. Seeds yellow. Cultivated. Seed.
- PI 537875 donor id: 4059. origin: Yemen Arab Republic. locality:
 Al Bayda Al Matrah. elevation: 1980m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base
 with usually a recurved peduncle. Seeds yellow.
 Cultivated. Seed.
- PI 537876 donor id: 4068. origin: Yemen Arab Republic. locality:
 Al Bayda Mushrab. elevation: 2070m. remarks: Race Caudatum durra. Head type 7 very compact, ovate,
 flattened base with usually a recurved peduncle. Seeds
 red. Cultivated. Seed.
- PI 537877 donor id: 4070. origin: Yemen Arab Republic. locality:
 Al Bayda Mushrab. elevation: 2070m. remarks: Race Caudatum. Head type 6 semi-compact, elliptical. Seeds
 red. Cultivated. Seed.

- PI 537878 donor id: 4084. origin: Yemen Arab Republic. locality:
 Al Bayda Al Rathah. elevation: 2060m. remarks: Race Kafir caudatum. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537879 donor id: 4085. origin: Yemen Arab Republic. locality:
 Al Bayda Al Rathah. elevation: 2060m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537880 donor id: 4102. origin: Yemen Arab Republic. locality:
 Al Bayda Mathmakyn. elevation: 2060m. remarks: Race Kafir caudatum. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537881 donor id: 4111. origin: Yemen Arab Republic. locality:
 Al Bayda Alkaah. elevation: 2080m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537882 donor id: 4115. origin: Yemen Arab Republic. locality:
 Al Bayda Alzaher. elevation: 2090m. remarks: Race Kafir caudatum. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537883 donor id: 4116. origin: Yemen Arab Republic. locality:
 Al Bayda Alzaher. elevation: 2090m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537884 donor id: 4117. origin: Yemen Arab Republic. locality:
 Al Bayda Alzaher. elevation: 2090m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537885 donor id: 4118. origin: Yemen Arab Republic. locality:
 Al Bayda Alzaher. elevation: 2090m. remarks: Race Durra caudatum. Head type 4 semi-open, elongated,
 elliptical. Seeds yellow. Cultivated. Seed.
- PI 537886 donor id: 4119. origin: Yemen Arab Republic. locality:
 Al Bayda Alzaher. elevation: 2090m. remarks: Race Caudatum kafir. Head type 4 semi-open, elongated,
 elliptical. Seeds yellow. Cultivated. Seed.
- PI 537887 donor id: 4120. origin: Yemen Arab Republic. locality:
 Al Bayda Alzaher. elevation: 2090m. remarks: Race Durra caudatum. Head type 4 semi-open, elongated,
 elliptical. Seeds orange. Cultivated. Seed.

- PI 537888 donor id: 4124. origin: Yemen Arab Republic. locality:
 Al Bayda Alzaher. elevation: 2100m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical.
 Seeds brown. Cultivated. Seed.
- PI 537889 donor id: 4132. origin: Yemen Arab Republic. locality:
 Al Bayda Alzaher. elevation: 2100m. remarks: Race Caudatum kafir. Head type 6 semi-compact, elliptical.
 Seeds brown. Cultivated. Seed.
- PI 537890 donor id: 4133. origin: Yemen Arab Republic. locality:
 Al Bayda Alzaher. elevation: 2100m. remarks: Race Caudatum kafir. Head type 6 semi-compact, elliptical.
 Seeds brown. Cultivated. Seed.
- PI 537891 donor id: 4136. origin: Yemen Arab Republic. locality:
 Al Bayda Alzaher. elevation: 2100m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537892 donor id: 4137. origin: Yemen Arab Republic. locality:
 Al Bayda Alzaher. elevation: 2100m. remarks: Race Kafir durra. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537893 donor id: 4140. origin: Yemen Arab Republic. locality:
 Al Bayda Alzaher. elevation: 2100m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537894 donor id: 4143. origin: Yemen Arab Republic. locality:
 Al Bayda Alzaher. elevation: 2100m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537895 donor id: 4145. origin: Yemen Arab Republic. locality:
 Al Bayda Alzaher. elevation: 2100m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537896 donor id: 4152. origin: Yemen Arab Republic. locality:
 Al Bayda Alfwah. elevation: 2080m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537897 donor id: 4153. origin: Yemen Arab Republic. locality:
 Al Bayda Alfwah. elevation: 2080m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.

- PI 537898 donor id: 4155. origin: Yemen Arab Republic. locality:
 Al Bayda Alfwah. elevation: 2080m. remarks: Race Durra kafir. Head type 7 very compact, ovate, flattened
 base with usually a recurved peduncle. Seeds yellow.
 Cultivated. Seed.
- PI 537899 donor id: 4164. origin: Yemen Arab Republic. locality:
 Al Bayda Alzaher. elevation: 2090m. remarks: Race Kafir durra. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537900 donor id: 4167. origin: Yemen Arab Republic. locality:
 Al Bayda Beer Algarm. elevation: 2050m. remarks: Race Kafir caudatum. Head type 6 semi-compact, elliptical,
 Seeds yellow. Cultivated. Seed.
- PI 537901 donor id: 4178. origin: Yemen Arab Republic. locality:
 Al Bayda Al Matar. elevation: 2100m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537902 donor id: 4182. origin: Yemen Arab Republic. locality:
 Al Bayda Beer Algarwy. elevation: 2050m. remarks: Race
 Kafir caudatum. Head type 5 semi-compact, ovate.
 Seeds yellow. Cultivated. Seed.
- PI 537903 donor id: 4192. origin: Yemen Arab Republic. locality:
 Al Bayda Alsharyah. elevation: 2070m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537904 donor id: 4193. origin: Yemen Arab Republic. locality:
 Al Bayda Alsharyah. elevation: 2070m. remarks: Race Kafir durra. Head type 7 very compact, ovate, flattened
 base with usually a recurved peduncle. Seeds yellow.
 Cultivated. Seed.
- PI 537905 donor id: 4194. origin: Yemen Arab Republic. locality:
 Al Bayda Alsharyah. elevation: 2070m. remarks: Race Caudatum kafir. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537906 donor id: 4195. origin: Yemen Arab Republic. locality:
 Al Bayda Alsharyah. elevation: 2070m. remarks: Race Caudatum kafir. Head type 4 semi-open, elongated,
 elliptical. Seeds yellow. Cultivated. Seed.
- PI 537907 donor id: 4197. origin: Yemen Arab Republic. locality:
 Al Bayda Alsharyah. elevation: 2070m. remarks: Race Caudatum kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow and light pink. Cultivated. Seed.

- PI 537908 donor id: 4198. origin: Yemen Arab Republic. locality:
 Al Bayda Alsharyah. elevation: 2070m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537909 donor id: 4200. origin: Yemen Arab Republic. locality:
 Al Bayda Alsharyah. elevation: 2070m. remarks: Race Caudatum kafir. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537910 donor id: 4201. origin: Yemen Arab Republic. locality:
 Al Bayda Alsharyah. elevation: 2070m. remarks: Race Caudatum kafir. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537911 donor id: 4203. origin: Yemen Arab Republic. locality:
 Al Bayda Alsharyah. elevation: 2070m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seeds
 light orange. Cultivated. Seed.
- PI 537912 donor id: 4224. origin: Yemen Arab Republic. locality:
 Al Bayda Awen. elevation: 2140m. remarks: Race Caudatum kafir. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537913 donor id: 4229. origin: Yemen Arab Republic. locality:
 Al Bayda Awen. elevation: 2140m. remarks: Race Caudatum kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537914 donor id: 4233. origin: Yemen Arab Republic. locality:
 Al Bayda Awen. elevation: 2140m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical.
 Seeds red and yellow. Cultivated. Seed.
- PI 537915 donor id: 4264. origin: Yemen Arab Republic. locality:
 Al Bayda. elevation: 2010m. remarks: Race Durra
 kafir. Head type 4 semi-open, elongated, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537916 donor id: 4282. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 1940m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537917 donor id: 4287. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 1940m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.

- PI 537918 donor id: 4288. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 1940m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537919 donor id: 4289. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 1940m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537920 donor id: 4290. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 1940m. remarks: Race Kafir durra. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537921 donor id: 4310. origin: Yemen Arab Republic. locality:
 Al Bayda Al Dakik. elevation: 1970m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical.
 Seeds brown and yellow. Cultivated. Seed.
- PI 537922 donor id: 4311. origin: Yemen Arab Republic. locality:
 Al Bayda Al Tahareyh. elevation: 2030m. remarks: Race Durra kafir. Head type 7 very compact, ovate, flattened
 base with usually a recurved peducle. Seeds yellow.
 Cultivated. Seed.
- PI 537923 donor id: 4314. origin: Yemen Arab Republic. locality:
 Al Bayda Al Mashazih. elevation: 2010m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seeds
 vellow. Cultivated. Seed.
- PI 537924 donor id: 4315. origin: Yemen Arab Republic. locality:
 Al Bayda Al Mashazih. elevation: 2010m. remarks: Race Kafir caudatum. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537925 donor id: 4316. origin: Yemen Arab Republic. locality:
 Al Bayda Al Daharya. elevation: 2030m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537926 donor id: 4317. origin: Yemen Arab Republic. locality:
 Al Bayda Al Daharya. elevation: 2030m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537927 donor id: 4319. origin: Yemen Arab Republic. locality:
 Al Bayda Al Daharya. elevation: 2030m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.

- PI 537928 donor id: 4320. origin: Yemen Arab Republic. locality:
 Al Bayda Al Mashazih. elevation: 2010m. remarks: Race Durra kafir. Head type 7 very compact, ovate, flattened
 base with usually a recurved peduncle. Seeds yellow.
 Cultivated. Seed.
- PI 537929 donor id: 4322. origin: Yemen Arab Republic. locality:
 Al Bayda Al Mashazih. elevation: 2010m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537930 donor id: 4323. origin: Yemen Arab Republic. locality:
 Al Bayda Al Mashazih. elevation: 2010m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537931 donor id: 4326. origin: Yemen Arab Republic. locality:
 Al Bayda Al Masher. elevation: 2030m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537932 donor id: 4336. origin: Yemen Arab Republic. locality:
 Al Bayda Al Redah. elevation: 2000m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537933 donor id: 4353. origin: Yemen Arab Republic. locality:
 Al Bayda Marda AlAael. elevation: 2020m. remarks: Race
 Caudatum kafir. Head type 7 very compact, ovate,
 flattened base with usually a recurved peduncle. Seeds
 yellow. Cultivated. Seed.
- PI 537934 donor id: 4357. origin: Yemen Arab Republic. locality:
 Al Bayda Marda AlAael. elevation: 2020m. remarks: Race
 Durra kafir. Head type 7 very compact, ovate,
 flattened base with usually a recurved peduncle. Seeds
 yellow. Cultivated. Seed.
- PI 537935 donor id: 4358. origin: Yemen Arab Republic. locality:
 Al Bayda Marda AlAael. elevation: 2020m. remarks: Race
 Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537936 donor id: 4361. origin: Yemen Arab Republic. locality:
 Al Bayda Marda AlAael. elevation: 2020m. remarks: Race
 Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537937 donor id: 4365. origin: Yemen Arab Republic. locality:
 Al Bayda Marda AlAael. elevation: 2020m. remarks: Race
 Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.

- PI 537938 donor id: 4370. origin: Yemen Arab Republic. locality:
 Al Bayda Afar. elevation: 2030m. remarks: Race Caudatum kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537939 donor id: 4374. origin: Yemen Arab Republic. locality:
 Al Bayda Al Akar. elevation: 2080m. remarks: Race Kafir durra. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537940 donor id: 4376. origin: Yemen Arab Republic. locality:
 Al Bayda Al Sowedya. elevation: 2080m. remarks: Race Caudatum kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537941 donor id: 4384. origin: Yemen Arab Republic. locality:
 Al Bayda Al Sowedya. elevation: 2030m. remarks: Race Durra kafir. Head type 7 very compact, ovate, flattened
 base with usually a recurved peduncle. Seeds yellow.
 Cultivated. Seed.
- PI 537942 donor id: 4385. origin: Yemen Arab Republic. locality:
 Al Bayda Al Sowedya. elevation: 2030m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537943 donor id: 4391. origin: Yemen Arab Republic. locality: Ibb. elevation: 1550m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seeds orange. Cultivated. Seed.
- PI 537944 donor id: 4397. origin: Yemen Arab Republic. locality: Ibb Sahul. elevation: 1425m. remarks: Race Bicolor. Head type 4 semi-open, elongated, elliptical. Seeds yellow. Cultivated. Seed.
- PI 537945 donor id: 4398. origin: Yemen Arab Republic. locality: Ibb Sahul. elevation: 1425m. remarks: Race Caudatum kafir. Head type 4 semi-open, elongated, elliptical. Seeds brown. Cultivated. Seed.
- PI 537946 donor id: 4402. origin: Yemen Arab Republic. locality: Suk Al-Sabt. elevation: 1450m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 537947 donor id: 4409. origin: Yemen Arab Republic. locality: Ibb Sowek. elevation: 1450m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seeds light orange. Cultivated. Seed.

- PI 537948 donor id: 4410. origin: Yemen Arab Republic. locality: Ibb Sowek. elevation: 1500m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seeds light orange. Cultivated. Seed.
- PI 537949 donor id: 4412. origin: Yemen Arab Republic. locality:
 Ibb Sowek. elevation: 1450m. remarks: Race Durra
 Kafir. Head type 4 semi-open, elongated, elliptical.
 Seeds light yellow. Cultivated. Seed.
- PI 537950 donor id: 4413. origin: Yemen Arab Republic. locality: Ibb Dalil. elevation: 1550m. remarks: Race Kafir caudatum. Head type 6 semi-compact, elliptical. Seeds orange. Cultivated. Seed.
- PI 537951 donor id: 4416. origin: Yemen Arab Republic. locality: Ibb Dalil. elevation: 1650m. remarks: Race Caudatum kafir. Head type 5 semi-compact, ovate. Seeds yellow. Cultivated. Seed.
- PI 537952 donor id: 4447. origin: Yemen Arab Republic. locality:
 Radah. elevation: 1425m. remarks: Race Caudatum
 kafir. Head type 5 semi-compact, ovate. Seeds yellow.
 Cultivated. Seed.
- PI 537953 donor id: 4449. origin: Yemen Arab Republic. locality:
 Damar Bani Ziad. elevation: 2190m. remarks: Race Caudatum kafir. Head type 6 semi-compact, elliptical.
 Seeds dark yellow. Cultivated. Seed.
- PI 537954 donor id: 4489. origin: Yemen Arab Republic. locality:
 Akabat. elevation: 1670m. remarks: Race Caudatum
 kafir. Head type 4 semi-open, elongated, elliptical.
 Seeds dark white. Cultivated. Seed.
- PI 537955 donor id: 4498. origin: Yemen Arab Republic. locality:
 Damar Rada'a Alkahir. elevation: 2000m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seeds yellow. Cultivated. Seed.
- PI 537956 donor id: 4511. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 1940m. remarks: Race Caudatum durra. Head type 7 very compact, ovate,
 flattened base with usually a recurved peduncle. Seeds
 yellow. Cultivated. Seed.
- PI 537957 donor id: 4513. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 1940m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.

PI 537714 to 537966-continued

- PI 537958 donor id: 4514. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 1940m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seeds
 yellow. Cultivated. Seed.
- PI 537959 donor id: 4516. origin: Yemen Arab Republic. locality:
 Al Bayda Marda AlAael. elevation: 2020m. remarks: Race
 Durra caudatum. Head type 5 semi-compact, ovate.
 Seeds yellow. Cultivated. Seed.
- PI 537960 donor id: 4517. origin: Yemen Arab Republic. locality:
 Al Bayda Afar AlAael. elevation: 2020m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical.
 Seeds yellow. Cultivated. Seed.
- PI 537961 donor id: 4519. origin: Yemen Arab Republic. locality:
 Dalil Ibb. elevation: 1550m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seeds light
 orange. Cultivated. Seed.
- PI 537962 donor id: 4524. origin: Yemen Arab Republic. remarks:
 Race Caudatum. Head type 6 semi-compact, elliptical.
 Seeds brown. Cultivated. Seed.
- PI 537963 donor id: 4556. origin: Yemen Arab Republic. locality:
 Al Asha. elevation: 1193m. remarks: Race Caudatum
 kafir. Head type 5 semi-compact, ovate. Seeds white.
 Cultivated. Seed.
- PI 537964 donor id: 4558. origin: Yemen Arab Republic. locality:
 Al Asha. elevation: 1193m. remarks: Race Durra
 caudatum. Head type 6 semi-compact, elliptical. Seeds
 white. Cultivated. Seed.
- PI 537965 donor id: 4560. origin: Yemen Arab Republic. locality: Wadi Khaywan. elevation: 1690m. remarks: Race Durra caudatum. Head type 7 very compact, ovate, flattened base with usually a recurved peduncle. Seeds white. Cultivated. Seed.
- PI 537966 donor id: 4561. origin: Yemen Arab Republic. locality: Wadi Khaywan. elevation: 1690m. remarks: Race Durra caudatum. Head type 7 very compact, ovate, flattened base with usually a recurved peduncle. Seeds tan. Cultivated. Seed.
- PI 537967. Hordeum vulgare L. POACEAE Barley
 - Donated by: Wesenberg, D.M., Agricultural Research Service -- USDA, P.O. Box 307, Aberdeen, Idaho, United States; and Idaho Agr. Exp. Sta.. Received December 1990.

PI 537967-continued

origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 307, Aberdeen, Idaho 83210. cultivar: 79Ab10719-66LC. pedigree: 73Ab2199/Karla, F5. remarks: Six-row feed barly type. Will compete favorably with existing six-row spring barley varieties in nonirrigated and dryland environments in Idaho and other western states. Cultivar. Seed.

PI 537968 to 537979. Triticum aestivum L. POACEAE Common wheat

Donated by: Waines, J.G., Dept. of Botany and Plant Sciences, University of California, Riverside, California, United States. remarks: Received through IBPGR, Rome, Italy. Received October 31, 1989.

- PI 537968 donor id: 5/19. origin: Turkey. collected: June 12, 1987. collector id: 5/19. locality: Farmland, valley slope, grassland, roadside, excessive drainage, loam soil, medium stoniness, 5km N of Kumluca on Ovacik road, Adiyaman Province. latitude: 37 deg. 32 min. N. longitude: 38 deg. 26 min. E. elevation: 595m. remarks: Population ten plants. Rainfed subsistence. Sown November, harvested June. Used for food. Winter Annual. Primtiv-cv. Seed.
- PI 537969 donor id: 5/20. origin: Turkey. collected: June 12, 1987. collector id: 5/20. locality: Farmland, valley slope, grassland, arable, free and impeded drainage, loam soil, medium stoniness, 5km N of Kumluca on Ovacik road, Adiyaman Province. latitude: 37 deg. 32 min. N. longitude: 38 deg. 26 min. E. elevation: 595m. remarks: Population twenty plants. Several spikes per plant. Rainfed subsistence. Sown November, harvested June. Used for food. Winter Annual. Primtiv-cv. Seed.
- PI 537970 donor id: 12/4. origin: Turkey. local name: Bugday. collected: June 13, 1987. collector id: 12/4. locality: Farmland, valley bottom, grassland, swampland, clay soil, medium stoniness, along stream 2-3km after third aqueduct, 5-6km E of Alakoptu village, Adiyaman Province. latitude: 37 deg. 38 min. N. longitude: 38 deg. 39 min. E. elevation: 475m. remarks: One hundred plants sampled. Population 1000. Rainfed subsistence. Sown November, harvested June. Used for food. Winter Annual. Primtiv-cv. Seed.

- PI 537971 donor id: 12/5. origin: Turkey. local name: Bugday. collected: June 13, 1987. collector id: 12/5. locality: Farmland, valley bottom, grassland, swampland, clay soil, medium stoniness, along stream 2-3km after third aqueduct, 5-6km E of Alakoptu village, Adiyaman Province. latitude: 37 deg. 38 min. N. longitude: 38 deg. 39 min. E. elevation: 475m. remarks: Population 50 plants. Rainfed subsistence. Sown November, harvested June. Used for food. Winter Annual. Primtiv-cv. Seed.
- PI 537972 donor id: 14/15. origin: Turkey. local name: Bugday. collected: June 10, 1987. collector id: 14/15. locality: Farmland, valley slope, grassland, limestone tallus with clay, high stoniness, stream bed anc NE slope that flows into Ziyaret river, Adiyaman Province. latitude: 37 deg. 30 min. N. longitude: 38 deg. 21 min. E. elevation: 415m. remarks: Population 100 plants. Rainfed subsistence. Sown November, harvested June. Used for food. Winter Annual. Primtiv-cv. Seed.
- PI 537973 donor id: 14/16. origin: Turkey. local name: Bugday. collected: June 10, 1987. collector id: 14/16. locality: Farmland, valley slope, grassland, limestone tallus with clay, high stoniness, stream bed and NE slope that flows into Ziyaret river, Adiyaman Province. latitude: 37 deg. 30 min. N. longitude: 38 deg. 21 min. E. elevation: 415m. remarks: Population 20 plants. Rainfed subsistence. Sown November, harvested June. Used for human consumption. Winter Annual. Primtiv-cv. Seed.
- PI 537974 donor id: 14/17. origin: Turkey. collected: June 10, 1987. collector id: 14/17. locality: Farmland, valley slope, grassland, limestone tallus with clay, high stoniness, stream bed and NE slope that flows into Ziyaret river, Adiyaman Province. latitude: 37 deg. 30 min. N. longitude: 38 deg. 21 min. E. elevation: 415m. remarks: Population 20 plants. Rainfed subsistance. Sown November, harvested June. Used for human consumption. Winter Annual. Primtiv-cv. Seed.
- PI 537975 donor id: 14/18. origin: Turkey. collected: June 10, 1987. collector id: 14/18. locality: Farmland, valley slope, grassland, limestone tallus with clay, high stoniness, stream bed and NE slope that flows into Ziyaret river, Adiyaman Province. latitude: 37 deg. 30 min. N. longitude: 38 deg. 21 min. E. elevation: 415m. remarks: Population 10 plants. Rainfed subsistance. Sown November, harvested June. Used for human food. Winter Annual. Primtiv-cv. Seed.

- PI 537976 donor id: 24/6. origin: Turkey. collected: June 16, 1987. collector id: 24/6. locality: Farmland, weedy, plain, arable wasteland, loam soil, low stoniness, margins of fields and roads, and adjacent vinyard, S of main road 1 km E of Tusagil jct with Adiyaman to Siverek road, Urfa Province. latitude: 37 deg. 44 min. N. longitude: 38 deg. 57 min. E. elevation: 580m. remarks: Population about 1000, 100 sampled. Plants weedy. Rainfed subsistence. Sown November, harvested June. Used for human food. Associated species: T. boeoticum and T. urartu. Winter Annual. Primtiv-cv. Seed.
- PI 537977 donor id: 76/l. origin: Turkey. collected: June 16, 1987. collector id: 76/l. locality: Farmland, terrace, arable wasteland, loam soil, medium stoniness, wet area, behind spring and along field margin and path parallel to Firat, S of Tille, Adiyaman Province. latitude: 37 deg. 45 min. N. longitude: 38 deg. 53 min. E. elevation: 450m. remarks: Fifty plants sampled out of population of 1500. Rainfed subsistence. Sown November, harvested June. Used for human food. Winter Annual. Primtiv-cv. Seed.
- PI 537978 donor id: 88/2. origin: Turkey. collected: June 16, 1987. collector id: 88/2. locality: Farmland, terrace, arable wasteland, loam soil, low stoniness, margins of road and adjacent fields, E side of Firat, 0.25km N of As. Kirco turn from Tille to Siverek, road, Urfa Province. latitude: 37 deg. 44 min. N. longitude: 38 deg. 54 min. E. elevation: 460m. remarks: Twenty plants sampled out of population of 100. Rainfed subsistence. Sown November, harvested June. Used for human food. Possible mixed sample with T. durum. Winter Annual. Primtiv-cv. Seed.
- PI 537979 donor id: 92/3. origin: Turkey. collected: June 16, 1987. collector id: 92/3. locality: Farmland, plain, arable, loam soil, basaltic plain, roadside, 6km N of Sepetoren, Urfa Province. latitude: 37 deg. 47 min. N. longitude: 39 deg. 02 min. E. elevation: 620m. remarks: Population twenty plants. Rainfed subsistence. Sown November, harvested June. Used for human food. Winter Annual. Primtiv-cv. Seed.
- PI 537980 to 537997. Triticum durum Desf. POACEAE Durum wheat

Donated by: Waines, J.G., Dept. of Botany and Plant Sciences, University of California, Riverside, California, United States. remarks: Received through IBPGR, Rome, Italy. Received October 31, 1989.

- PI 537980 donor id: 5/21. origin: Turkey. collected: June 12, 1987. collector id: 5/21. locality: Farmland, valley slope, primary grassland, arable, loam soil, medium stoniess, roadside, stream sides, 5km N of Kumluca on Ovacik road, Adiyaman Province. latitude: 37 deg. 32 min. N. longitude: 38 deg. 26 min. E. elevation: 595m. remarks: Fifty plants sampled out of a population of 500. Rainfed subsistence. Sown November, harvested June. Used of human food. Winter Annual. Primtiv-cv. Seed.
- PI 537981 donor id: 19/4. origin: Turkey. collected: June 11, 1987. collector id: 19/4. locality: Farmland, bottom of valley slope, grassland, clay soil, low stoniness, W facing slope above Samsat: to Adiyaman road N of turn to Kisle, Adiyaman Province. latitude: 37 deg. 37 min. N. longitude: 33 deg. 22 min. E. elevation: 435m. remarks: Three hundred plants sampled out of population of thousands. Rainfed subsistence. Sown November, harvested June. Used for human food. Winter Annual. Primtiv-cv. Seed.
- PI 537982 donor id: 1914. origin: Turkey. collector id: 19/14. Seed.
- PI 537983 donor id: 31/15. origin: Turkey. collected: June 17, 1987. collector id: 31/15. locality: Farmland, arable valley slope, clay soil, high stoniness, roadside, 1 km W of Cermis, Urfa Province. latitude: 37 deg. 38 min. N. longitude: 38 deg. 40 min. E. elevation: 550m. remarks: Two hundred plants sampled out of population of 1000. Rainfed subsistence. Sown November, harvested June. Used human food. Winter Annual. Primtiv-cv. Seed.
- PI 537984 donor id: 50/1. origin: Turkey. collected: June 11, 1987. collector id: 50/1. locality: Farmland, plain, arable wasteland, clay soil, medium stoniness, N of junction of Turus to Adiyaman secondary road, with road to Ekinciler and Kilinglar villages, Adiyaman Province. latitude: 37 deg. 31 min. N. longitude: 38 deg. 13 min. E. elevation: 650m. remarks: One hundred plants sampled out of population of thousands. Rainfed subsistence. Sown November, harvested June. Used for human food. Winter Annual. Primtiv-cv. Seed.

- PI 537985 donor id: 56/2. origin: Turkey. collected: June 11, 1987. collector id: 56/2. locality: Farmland, valley bottom, arable, swampland, 0.5km SE edge of Barbaci village, by a spring, Adiyaman Province. latitude: 37 deg. 33 min. N. longitude: 38 deg. 13 min. E. elevation: 555m. remarks: One hundred plants sampled out of 1000 population. Rainfed subsistence. Sown November, harvested June. Used for human food. Winter Annual. Primtiv-cv. Seed.
- PI 537986 donor id: 58/1. origin: Turkey. collected: June 11, 1987. collector id: 58/1. locality: Farmland, valley bottom, wasteland, clay soil, medium stoniness, ditch bottom 1km NE Niermera village, Adiyaman Province. latitude: 38 deg. 20 min. E. longitude: 33 deg. 00 min. E. elevation: 555m. remarks: Two hundred plants sampled. Population of thousands. Rainfed subsistance. Sown November, harvested June. Used for human food. Winter Annual. Primtiv-cv. Seed.
- PI 537987 donor id: 59/1. origin: Turkey. collected: June 11, 1987. collector id: 59/1. locality: Farmland, summit, arable, clay loam soil, medium stoniness, roadside, 1 km NE of Kisla by fig trees and vinyard, Adiyaman Province. latitude: 37 deg. 35 min. N. longitude: 38 deg. 20 min. E. elevation: 615m. remarks: Two hundred plants sampled out of population of thousands. Rainfed subsistance. Sown November, harvested June. Used for human food. Winter Annual. Primtiv-cv. Seed.
- PI 537988 donor id: 62/4. origin: Turkey. collected: June 12, 1987. collector id: 62/4. locality: Farmland, plain, wasteland, warm soil, medium stoniness, roadside, next to durum and lentil field, adjacent ditch, bottom, E side of Ziyane river from Merr, 5km S of Disbudak village. latitude: 37 deg. 38 min. N. longitude: 38 deg. 21 min. E. elevation: 480m. remarks: Population 100 plants. Rainfed subsistence. Sown November, harvested June. Used for human food. Winter Annual. Primtiv-cv. Seed.
- PI 537989 donor id: 66/2. origin: Turkey. collected: June 12, 1987. collector id: 66/2. locality: Farmland, valley slope, clay soil, medium stoniness, Adiyaman Province. latitude: 37 deg. 32 min. N. longitude: 38 deg. 26 min. E. elevation: 595m. remarks: One hundred plants sampled out of population of 1000. Sown November, harvested June. Used for human food. Associated species: Aegilops speltoides. Winter Annual. Primtiv-cv. Seed.

- PI 537990 donor id: 70/1. origin: Turkey. collected: June 13, 1987. collector id: 70/1. locality: Farmland, terrace, above Firat, grassland, wasteland, loam soil, medium stoniness, riverside of road, 2km E of Samsat between Kilizan and Havilan, Adiyaman Province. latitude: 37 deg. 32 min. N. longitude: 38 deg. 31 min. E. elevation: 410m. remarks: Fifty plants sampled out of population of thousands. Rainfed subsistence. Sown November, harvested June. Used for human food. Winter Annual. Primtiv-cv. Seed.
- PI 537991 donor id: 71/5. origin: Turkey. collected: June 13, 1987. collector id: 71/5. locality: Farmland, valley slope, grassland, sides of dry stream, clay soil, low stoniness, 4km NE of Kovanoluk, Adiyaman Province. latitude: 37 deg. 35 min. N. longitude: 33 deg. 33 min. E. elevation: 460m. remarks: Population twenty plants. Rainfed subsistence. Sown November, harvested June. Used for human food. Winter Annual. Primtiv-cv. Seed.
- PI 537992 donor id: 73/3. origin: Turkey. collected: June 14, 1987. collector id: 73/3. locality: Farmland, valley slope, arable, wasteland, loam soil, medium stoniness, roadside descending to Kahta river, 5km E of Kahta, Adiyaman Province. latitude: 37 deg. 44 min. N. longitude: 38 deg. 40 min. E. elevation: 530m. remarks: Fifty plants sampled out of hundreds. Rainfed subsistence. Sown November, harvested June. Used for human food. Winter Annual. Primtiv-cv. Seed.
- PI 537993 donor id: 76/6. origin: Turkey. collected: June 14, 1987. collector id: 76/6. locality: Farmland, terrace, wasteland, loam soil, medium stoniness, wet area, just S of Tille behind spring along field margin path parallel to Firat, Adiyaman Province. latitude: 37 deg. 45 min. N. longitude: 38 deg. 53 min. E. elevation: 450m. remarks: Population ten plants. Rainfed subsistence. Sown November, harvested June. Used for human food. Winter Annual. Primtiv-cv. Seed.
- PI 537994 donor id: 78/2. origin: Turkey. collected: June 14, 1987. collector id: 78/2. locality: Farmland, summit, arable, loam soil, medium stoniness, chickpea and durum fields, roadside, 1 km S of Tille, Adiyaman Province. latitude: 37 deg. 43 min. N. longitude: 38 deg. 53 min. E. elevation: 570m. remarks: Fifty plants sampled out of hundreds, weedy. Rainfed subsistence. Sown November, harvested June. Used for human food. Winter Annual. Primtiv-cv. Seed.

- PI 537995 donor id: 80/1. origin: Turkey. collected: June 14, 1987. collector id: 80/1. locality: Farmland, arable summit, loam soil, medium stoniness, lentil fields, 0.5km S of Merdi village, N side of Firat at junction of small tributary, Adiyaman Province. latitude: 37 deg. 41 min. N. longitude: 38 deg. 51 min. E. elevation: 515m. remarks: Fifty plants sampled out of hundreds. Rainfed subsistence. Sown November, harvested June. Used for human food. Winter Annual. Primtiv-cv. Seed.
- PI 537996 donor id: 82/10. origin: Turkey. collected: June 14, 1987. collector id: 82/10. locality: Farmland, plain, arable, wasteland, clay soil, low stoniness, near Adiyaman Siverek road at turn off 6km S of Besele, 18km from Kahtal river, Adiyaman Province. latitude: 37 deg. 46 min. N. longitude: 38 deg. 47 min. E. elevation: 670m. remarks: Fifty plants sampled out of hundreds. Rainfed subsistence. Sown November, harvested July. Used for human food. Associated species: T. boeotium and Aegilops speltoides and others. Winter Annual. Primtiv-cv. Seed.
- PI 537997 donor id: 91/2. origin: Turkey. collected: June 16, 1987. collector id: 91/2. locality: Farmland, plain, arable, wasteland, margin of road adjacent to wheat field, loam soil, low stoniness, 10km E and N of Tusagil junction on road to Sagara and Burcelik, Urfa Province. latitude: 37 deg. 44 min. N. longitude: 39 deg. 02 min. E. elevation: 590m. remarks: One hundred plants sampled out of 1000. Rainfed subsistence. Sown November, harvested June. Used for human food. Winter Annual. Primtiv-cv. Seed.
- PI 537998 to 538003. Triticum boeoticum Boiss. subsp. boeoticum POACEAE

Donated by: Waines, J.G., Dept. of Botany and Plant Sciences, University of California, Riverside, California, United States. remarks: Received through IBPGR, Rome, Italy. Received October 31, 1989.

PI 537998 donor id: 50/4. origin: Turkey. collected: June 11, 1987. collector id: 50/4. locality: Farmland, plain, arable, wasteland, clay soil, medium stoniness, roadside N of junction of Turus to Adiyaman secondary road with road to Ekinciler and Kilinglar villages, Adiyaman Province. latitude: 37 deg. 31 min. N. longitude: 38 deg. 13 min. E. elevation: 650m. remarks: Two hundred plants sampled out of a population of thousands, weedy. Winter Annual. Wild. Seed.

- PI 537999 donor id: 59/2. origin: Turkey. collected: June 11, 1987. collector id: 59/2. locality: Farmland, summit, arable, roadside, clay soil, medium stoniness, just NE of Kisla, by fig trees and vinyard, Adiyaman Province. latitude: 37 deg. 35 min. N. longitude: 38 deg. 20 min. E. elevation: 615m. remarks: Two hundred plants sampled out of a population of hundreds, weedy. Winter Annual. Wild. Seed.
- PI 538000 donor id: 61/2. origin: Turkey. collected: June 12, 1987. collector id: 61/2. locality: Farmland, plain, grassland, arable, loam soil, medium stoniness, adjacent to Disbudaic village, roadside Adiyaman to Samsat road, 14km S from center of Adiyaman, Adiyaman Province. latitude: 37 deg. 40 min. N. longitude: 38 deg. 21 min. E. elevation: 515m. remarks: One hundred plants sampled out of a population of 1000, weedy. Annual. Wild. Seed.
- PI 538001 donor id: 67/1. origin: Turkey. collected: June 13, 1987. collector id: 67/1. locality: Roadside, plain, arable, loam soil, medium stoniness, 33km from Ataturk Dam Headquarters N to Adiyaman, Adiyaman Province. latitude: 37 deg. 40 min. N. longitude: 38 deg. 13 min. E. remarks: One hundred plants sampled out of a population of thousands, weedy. Associated species: Bromus, Medicago. Annual. Wild. Seed.
- PI 538002 donor id: 68/14. origin: Turkey. collected: June 13, 1987. collector id: 68/14. locality: Roadside, plain, arable, loam soil, low stoniness, 26km S from Corral Adiyaman, on Adiyaman to Samsat road, Adiyaman Province. latitude: 37 deg. 33 min. N. longitude: 38 deg. 23 min. E. elevation: 540m. remarks: Population fifty plants, weedy. Annual. Wild. Seed.
- PI 538003 donor id: 74/3. origin: Turkey. collected: June 14, 1987. collector id: 74/3. locality: Farmland, road cut, valley slope, arable, loam soil, low stoniness, edge of field, 3km E of Kahta River Bridge across from Perral station, Adiyaman Province. latitude: 37 deg. 40 min. N. longitude: 38 deg. 42 min. E. elevation: 575m. remarks: Fifty plants sampled out of population of 100, weedy. Associated species: Avena sterilis, Phalaris tectorum, Aegilops triuncialis, Bromus tetorum, Lathyrus, Trifolium spp. and Onobrychis. Annual. Wild. Seed.
- PI 538004. Hordeum vulgare L. POACEAE Barley

Donated by: Svalof, A.B., United States. Received February 27, 1990.

PI 538004-continued

origin: United States. cultivar: SV80614. other id: PVP
9000061. source: Pending. group: PVPO. Cultivar.
Seed.

PI 538005. Lactuca sativa L. ASTERACEAE Lettuce

Donated by: TS Seeds B.V., United States. Received February 27, 1990.

origin: United States. cultivar: ELINE. other id: PVP 9000062. source: Pending. group: PVPO. Cultivar. Seed.

PI 538006. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: International Seeds, Inc., United States. Received February 27, 1990.

origin: United States. cultivar: GALA. other id: PVP
9000063. source: Pending. group: PVPO. Cultivar.
Seed.

PI 538007 to 538011. Zea mays L. subsp. mays POACEAE Corn

Donated by: Holden's Foundation Seeds, Inc., United States. Received February 27, 1990.

- PI 538007 origin: United States. cultivar: LH 127. other id: PVP 9000064. source: Pending. group: PVPO. Cultivar. Seed.
- PI 538008 origin: United States. cultivar: LH 163. other id: PVP 9000065. source: Pending. group: PVPO. Cultivar. Seed.
- PI 538009 origin: United States. cultivar: LH 196. other id: PVP 9000066. source: Pending. group: PVPO. Cultivar. Seed.
- PI 538010 origin: United States. cultivar: LH 206. other id: PVP 9000067. source: Pending. group: PVPO. Cultivar. Seed.
- PI 538011 origin: United States. cultivar: LH 220. other id: PVP 9000068. source: Pending. group: PVPO. Cultivar. Seed.

PI 538012. Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE Watermelon

Donated by: Coffey Seed Co., United States. Received February 27, 1990.

origin: United States. cultivar: CUTTER 55. other id: PVP 9000069. source: Pending. group: PVPO. Cultivar. Seed.

PI 538013. Carthamus tinctorius L. ASTERACEAE Safflower

Donated by: Adams Seed Co., United States. Received February 27, 1990.

origin: United States. cultivar: AG 1029. other id: PVP 9000070. source: Pending. group: PVPO. Cultivar. Seed.

PI 538014. Lycopersicon esculentum Miller SOLANACEAE Tomato

Donated by: Berry, S.Z., United States; and Ohio State University, United States. Received February 27, 1990.

origin: United States. cultivar: OHIO 7983. other id: PVP 9000072. source: Pending. group: PVPO. Cultivar. Seed.

PI 538015. Hordeum vulgare L. POACEAE Barley

Donated by: Busch Agricultural Resources, Inc., United States. Received February 27, 1990.

origin: United States. cultivar: B1215. other id: PVP 9000073. source: Pending. group: PVPO. Cultivar. Seed.

PI 538016 to 538017. Oryza sativa L. POACEAE Rice

Donated by: Farms of Texas Co., United States. Received February 27, 1990.

PI 538016 origin: United States. cultivar: RT-A1001. other id: PVP 9000074. source: Pending. group: PVPO. Cultivar. Seed.

PI 538017 origin: United States. cultivar: RT-A1002. other id: PVP 9000075. source: Pending. group: PVPO. Cultivar. Seed.

PI 538018. Cucumis melo L. CUCURBITACEAE Muskmelon

Donated by: Northrup King Co., United States. Received February 27, 1990.

origin: United States. cultivar: M24. other id: PVP 9000077. source: Pending. group: PVPO. Cultivar. Seed.

PI 538019. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: Pickseed West Inc., United States. Received February 27, 1990.

origin: United States. cultivar: COCHISE. other id: PVP 9000078. source: Pending. group: PVPO. Cultivar. Seed.

PI 538020. Cynodon dactylon (L.) Pers. POACEAE Bermudagrass

Donated by: Jacklin Seed Co., United States. Received February 27, 1990.

origin: United States. cultivar: CHEYENNE. other id: PVP 9000079. source: Pending. group: PVPO. Cultivar. Seed.

PI 538021. Medicago murex Willd. FABACEAE Alfalfa

Donated by: Vista Research, United States. Received February 27, 1990.

origin: United States. cultivar: LEGEND. other id: PVP 9000080. source: Pending. group: PVPO. Cultivar. Seed.

PI 538022. Pisum sativum L. FABACEAE Pea

Donated by: Asgrow Seed Co., United States. Received February 27, 1990.

origin: United States. cultivar: ALFI. other id: PVP
9000081. source: Pending. group: PVPO. Cultivar.
Seed.

PI 538023. Verbena x hybrida Voss VERBENACEAE Verbena

Donated by: Ball Seed Co., United States. Received February 27, 1990.

PI 538023-continued

origin: United States. cultivar: VALENTINE. other id: PVP 9000082. source: Pending. group: PVPO. Cultivar. Seed.

PI 538024. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Jacob Hartz Seed Co., Inc., United States. Received February 27, 1990.

origin: United States. cultivar: HARTZ 914. other id: PVP 9000083. source: Pending. group: PVPO. Cultivar. Seed.

PI 538025. Carthamus tinctorius L. ASTERACEAE Safflower

Donated by: Research and Development Institute, Inc., United States. Received February 27, 1990.

origin: United States. cultivar: MONTOLA-2000. other id: PVP 9000084. source: Pending. group: PVPO. Cultivar. Seed.

PI 538026 to 538027. Phaseolus vulgaris L. FABACEAE Garden bean

Donated by: Asgrow Seed Co., United States. Received February 27, 1990.

PI 538026 origin: United States. cultivar: OPUS. other id: PVP 9000085. source: Pending. group: PVPO. Cultivar. Seed.

PI 538027 origin: United States. cultivar: XP B203. other id: PVP 9000086. source: Pending. group: PVPO. Cultivar. Seed.

PI 538028. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: International Seeds, Inc., United States. Received February 27, 1990.

origin: United States. cultivar: MIRAGE. other id: PVP
9000087. source: Pending. group: PVPO. Cultivar.
Seed.

PI 538029 to 538030. Brassica oleracea var. botrytis L. BRASSICACEAE Cauliflower

Donated by: Rijk Zwaan Zaadteelt en Zaadhandel B.V., United States. Received February 27, 1990.

PI 538029 origin: United States. cultivar: LABRADOR. other id: PVP 9000088. source: Pending. group: PVPO. Cultivar. Seed.

PI 538030 origin: United States. cultivar: PROFIL. other id: PVP 9000089. source: Pending. group: PVPO. Cultivar. Seed.

PI 538031. Oryza sativa L. POACEAE Rice

Donated by: Sumitomo Chemical Co. Ltd., United States. Received February 27, 1990.

origin: United States. cultivar: SUMIRICE II. other id: PVP 9000090. source: Pending. group: PVPO. Cultivar. Seed.

PI 538032. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: International Seeds, Inc., United States. Received February 27, 1990.

origin: United States. cultivar: ERA. other id: PVP 9000091. source: Pending. group: PVPO. Cultivar. Seed.

PI 538033. Gossypium hirsutum L. MALVACEAE Cotton

Donated by: El-Zik, K.M., Texas Agr. Exp. Station, Dept. of Soil & Crop Sciences, Texas A&M University System, College Station, Texas, United States; and Texas A&M University. remarks: Tamcot HQ95 Cotton. Received February 27, 1990.

PI 538033-continued

origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil & Crop Sciences, Texas A&M University System, College Station, Texas 77843. cultivar: TAMCOT HQ95. pedigree: Tamcot CD3H X MAR-CABU'CS-2-1-83 and designated MAR-CABUCD3H-1-86. Tamcot CD3H originated from cross Tamcot SP37H X CDPS-1-77. CABU'CS-2-1-83 originated from cross CAMD-21-S-78 X BCUS-8-76. other id: PVP 9000092. source: Pending. group: PVPO. other id: CV-96. source: Crop Sci. 30(6):1359 1990. group: CSR-COTTON. remarks: Similar to Tamcot CD3H in fruiting characteristics, maturity, and yield potential, but produces significantly longer (0.05 inches) and stronger (2 g/tex) fibers than Tamcot CD3H. Approx. 66% of plants have flowers with cream pollen and 34% yellow pollen. Same levels of resistance to eight pathogens and four insects as Tamcot CD3H. Spring Annual. Cultivar. Seed.

PI 538034. Lactuca sativa L. ASTERACEAE Lettuce

Donated by: Genecorp, Inc., United States. Received February 27, 1990.

origin: United States. cultivar: GENECORP BOSTON. other id: PVP 9000094. source: Pending. group: PVPO. Cultivar. Seed.

PI 538035 to 538050. Abelmoschus sp. MALVACEAE

Donated by: Hamon, S., Laboratoire de Genetique, Centre d'Adiopodoume, ORSTOM, Abidjan, Ivory Coast. Received June 28, 1989.

- PI 538035 donor id: ORS 2254. origin: Nigeria. collector id: TB.82-1692. latitude: 05 deg. 13 min. N. longitude: 007 deg. 43 min. E. Seed.
- PI 538036 donor id: ORS 2255. origin: Nigeria. collector id: TB.82-1697. Seed.
- PI 538037 donor id: ORS 2256. origin: Nigeria. collector id: TB.21-1699. latitude: 06 deg. 39 min. N. longitude: 007 deg. 27 min. E. Seed.
- PI 538038 donor id: ORS 2385. origin: Guinea. collector id: CL 568. latitude: 10 deg. 10 min. N. longitude: 011 deg. 50 min. W. Seed.
- PI 538039 donor id: ORS 2415. origin: Guinea. collector id: CL 334.A. latitude: 09 deg. 40 min. N. longitude: 008 deg. 55 min. W. Seed.

PI 538035 to 538050-continued

- PI 538040 donor id: ORS 2647. origin: Nigeria. collector id: TB.82-1694. Seed.
- PI 538041 donor id: ORS 2649. origin: Nigeria. collector id: TB.82-1696. Seed.
- PI 538042 donor id: ORS 2652. origin: Nigeria. collector id: TB.82-1701. other id: TB.82-1701. Seed.
- PI 538043 donor id: ORS 2663. origin: Nigeria. collector id: TB.82-1715. Seed.
- PI 538044 donor id: ORS 2664. origin: Nigeria. collector id: TB.82-1716. Seed.
- PI 538045 donor id: ORS 2670. origin: Nigeria. collector id: NHAE-16. Seed.
- PI 538046 donor id: ORS 2673. origin: Nigeria. collector id: NHAE-25. Seed.
- PI 538047 donor id: ORS 2686. origin: Nigeria. collector id: NHAE-114. Seed.
- PI 538048 donor id: ORS 2697. origin: Nigeria. collector id: NHAE-270. Seed.
- PI 538049 donor id: ORS 2711. origin: Nigeria. collector id: NHAE-445. Seed.
- PI 538050 donor id: ORS 2721. origin: Zambia. collector id: NHAE-626. Seed.
- PI 538051 to 538161. Abelmoschus esculentus (L.) Moench MALVACEAE Okra

Donated by: Hamon, S., Laboratoire de Genetique, Centre d'Adiopodoume, ORSTOM, Abidjan, Ivory Coast. Received June 28, 1989.

- PI 538051 donor id: ORS 2262. origin: Nigeria. collector id: NHA 89. Seed.
- PI 538052 donor id: ORS 2672. origin: Nigeria. collector id: NHAE-21. Seed.
- PI 538053 donor id: ORS 2815. origin: Zambia. collector id: A 5037. latitude: 12 deg. 05 min. S. longitude: 024 deg. 17 min. E. Seed.

- PI 538054 donor id: ORS 2816. origin: Zambia. collector id: A 5104. latitude: 11 deg. 10 min. S. longitude: 024 deg. 10 min. E. Seed.
- PI 538055 donor id: ORS 2819. origin: Zambia. collector id: A 5180. latitude: 13 deg. 12 min. S. longitude: 023 deg. 00 min. E. Seed.
- PI 538056 donor id: ORS 2820. origin: Zambia. collector id: A 5251. latitude: 13 deg. 25 min. S. longitude: 025 deg. 00 min. E. Seed.
- PI 538057 donor id: ORS 2821. origin: Zambia. collector id: A 5269. latitude: 14 deg. 15 min. S. longitude: 024 deg. 54 min. E. Seed.
- PI 538058 donor id: ORS 2822. origin: Zambia. collector id: A 5286. latitude: 20 deg. 45 min. S. longitude: 016 deg. 10 min. E. Seed.
- PI 538059 donor id: ORS 2824. origin: Zambia. collector id: A 5325. latitude: 27 deg. 50 min. S. longitude: 016 deg. 42 min. E. Seed.
- PI 538060 donor id: ORS 2825. origin: Zambia. collector id: A 5337. latitude: 27 deg. 50 min. S. longitude: 016 deg. 50 min. E. Seed.
- PI 538061 donor id: ORS 2826. origin: Zambia. collector id: A 5353. latitude: 27 deg. 45 min. S. longitude: 016 deg. 40 min. E. Seed.
- PI 538062 donor id: ORS 2827. origin: Zambia. collector id: A 5367. latitude: 27 deg. 22 min. S. longitude: 017 deg. 08 min. E. Seed.
- PI 538063 donor id: ORS 2832. origin: Algeria. collector id: HR 9. Seed.
- PI 538064 donor id: ORS 2833. origin: Sudan. collector id: HSD 3. Seed.
- PI 538065 donor id: ORS 2834. origin: Sudan. collector id: HSD 11. Seed.
- PI 538066 donor id: ORS 2835. origin: Sudan. collector id: HSD 33. Seed.
- PI 538067 donor id: ORS 2836. origin: Sudan. collector id: HSD 54. Seed.

- PI 538068 donor id: ORS 2837. origin: Sudan. collector id: HSR 55. Seed.
- PI 538069 donor id: ORS 2838. origin: Sudan. collector id: HSD 56. Seed.
- PI 538070 donor id: ORS 2839. origin: Sudan. collector id: HSD 57. Seed.
- PI 538071 donor id: ORS 2840. origin: Sudan. collector id: HSD 68. Seed.
- PI 538072 donor id: ORS 2841. origin: Sudan. collector id: HSD 88. Seed.
- PI 538073 donor id: ORS 2842. origin: Sudan. collector id: HSD 89. Seed.
- PI 538074 donor id: ORS 2843. origin: Sudan. collector id: HSD 112. Seed.
- PI 538075 donor id: ORS 2844. origin: Sudan. collector id: HSD 116. Seed.
- PI 538076 donor id: ORS 2845. origin: Sudan. collector id: HSD 122. Seed.
- PI 538077 donor id: ORS 2846. origin: Sudan. collector id: HSD 124. Seed.
- PI 538078 donor id: ORS 2847. origin: Sudan. collector id: HSD 123. Seed.
- PI 538079 donor id: ORS 2848. origin: Sudan. collector id: HSD 127. Seed.
- PI 538080 donor id: ORS 2849. origin: Sudan. collector id: HSD 130. Seed.
- PI 538081 donor id: ORS 2850. origin: Sudan. collector id: HSD 132. Seed.
- PI 538082 donor id: ORS 2851. origin: Sudan. collector id: HSD 133. Seed.
- PI 538083 donor id: ORS 2852. origin: Sudan. collector id: HSD 134. Seed.
- PI 538084 donor id: ORS 2853. origin: Sudan. collector id: HSD 135. Seed.

- PI 538085 donor id: ORS 2854. origin: Sudan. collector id: HSD 143. Seed.
- PI 538086 donor id: ORS 2855. origin: Sudan. collector id: HSD 146. Seed.
- PI 538087 donor id: ORS 2856. origin: Sudan. collector id: HSD 147. Seed.
- PI 538088 donor id: ORS 2857. origin: Sudan. collector id: HSD 172. Seed.
- PI 538089 donor id: ORS 2859. origin: Sudan. collector id: HSD 186. Seed.
- PI 538090 donor id: ORS 2860. origin: Sudan. collector id: HSD 192. Seed.
- PI 538091 donor id: ORS 2861. origin: Sudan. collector id: HSD 210. Seed.
- PI 538092 donor id: ORS 2862. origin: Sudan. collector id: HSD 211. Seed.
- PI 538093 donor id: ORS 2863. origin: Sudan. collector id: HSD 225. Seed.
- PI 538094 donor id: ORS 2864. origin: Sudan. collector id: HSD 250. Seed.
- PI 538095 donor id: ORS 2865. origin: Sudan. collector id: HSD 266. Seed.
- PI 538096 donor id: ORS 2866. origin: Sudan. collector id: HSD 275. Seed.
- PI 538097 donor id: ORS 2867. origin: Sudan. collector id: HSD 280. Seed.
- PI 538098 donor id: ORS 2868. origin: Sudan. collector id: HSD 286. Seed.
- PI 538099 donor id: ORS 2870. origin: Sudan. collector id: HSD 295. Seed.
- PI 538100 donor id: ORS 2871. origin: Sudan. collector id: HSD 312. Seed.
- PI 538101 donor id: ORS 2873. origin: Sudan. collector id: HSD 314. Seed.

- PI 538102 donor id: ORS 2875. origin: Sudan. collector id: HSD 343. Seed.
- PI 538103 donor id: ORS 2876. origin: Sudan. collector id: HSD 344. Seed.
- PI 538104 donor id: ORS 2878. origin: Sudan. collector id: HSD 352. Seed.
- PI 538105 donor id: ORS 2879. origin: Sudan. collector id: HSD 353. Seed.
- PI 538106 donor id: ORS 2880. origin: Sudan. collector id: HSD 354. Seed.
- PI 538107 donor id: ORS 2881. origin: Sudan. collector id: HSD 355. Seed.
- PI 538108 donor id: ORS 2882. origin: Sudan. collector id: HSD 382. Seed.
- PI 538109 donor id: ORS 2883. origin: Sudan. collector id: HSD 386. Seed.
- PI 538110 donor id: ORS 2884. origin: Sudan. collector id: HSD 389. Seed.
- PI 538111 donor id: ORS 2885. origin: Sudan. collector id: HSD 390. Seed.
- PI 538112 donor id: ORS 2886. origin: Sudan. collector id: HSD 391. Seed.
- PI 538113 donor id: ORS 2887. origin: Sudan. collector id: HSD 423. Seed.
- PI 538114 donor id: ORS 2888. origin: Sudan. collector id: HSD 442. Seed.
- PI 538115 donor id: ORS 2889. origin: Sudan. collector id: HSD 459. Seed.
- PI 538116 donor id: ORS 2890. origin: Sudan. collector id: HSD 462. Seed.
- PI 538117 donor id: ORS 2891. origin: Sudan. collector id: HSD 463. Seed.
- PI 538118 donor id: ORS 2892. origin: Sudan. collector id: HDS 464. Seed.

PI 538051 to 538161-continued

PI 538119 donor id: ORS 2894. origin: Sudan. collector id: HSD 527. Seed. donor id: ORS 2895. origin: Sudan. collector id: HSD PI 538120 594. Seed. collector id: HSD PI 538121 donor id: ORS 2896. origin: Sudan. 595. Seed. donor id: ORS 2897. origin: Sudan. collector id: HSD PI 538122 Seed. 596. donor id: ORS 2898. origin: Sudan. collector id: HSD PI 538123 597. Seed. collector id: HSD PI 538124 donor id: ORS 2899. origin: Sudan. 598. Seed. PI 538125 collector id: HSD donor id: ORS 2900. origin: Sudan. Seed. 599. PI 538126 donor id: ORS 2901. origin: Sudan. collector id: HSD Seed. 600. donor id: ORS 2902. origin: Sudan. collector id: HSD PI 538127 601. Seed. collector id: HSD PI 538128 donor id: ORS 2903. origin: Sudan. 602. Seed. PI 538129 donor id: ORS 2904. origin: Sudan. collector id: HDS 603. Seed. PI 538130 donor id: ORS 2905. origin: Sudan. collector id: HSD 604. Seed. collector id: HSD donor id: ORS 2906. origin: Sudan. PI 538131 605. Seed. PI 538132 donor id: ORS 2907. origin: Sudan. collector id: HSD Seed. 606. donor id: ORS 2908. PI 538133 origin: Sudan. collector id: HSD 607. Seed. donor id: ORS 2909. collector id: HSD PI 538134 origin: Sudan. 608. Seed. PI 538135 donor id: ORS 2911. origin: Sudan. collector id: HSD

610. Seed.

- PI 538136 donor id: ORS 2912. origin: Sudan. collector id: HSD 611. Seed.
- PI 538137 donor id: ORS 2913. origin: Sudan. collector id: HSD 612. Seed.
- PI 538138 donor id: ORS 2914. origin: Sudan. collector id: HSD 255. Seed.
- PI 538139 donor id: ORS 2933. origin: Egypt. collector id: HRI 19. latitude: 25 deg. 30 min. N. longitude: 032 deg. 30 min. E. Seed.
- PI 538140 donor id: ORS 2937. origin: Egypt. collector id: HRI 61. latitude: 26 deg. 30 min. N. longitude: 032 deg. 00 min. E. Seed.
- PI 538141 donor id: ORS 2939. origin: Egypt. collector id: HRI 91. latitude: 25 deg. 30 min. N. longitude: 030 deg. 30 min. E. Seed.
- PI 538142 donor id: ORS 2940. origin: Egypt. collector id: HRI 94. latitude: 25 deg. 30 min. N. longitude: 030 deg. 30 min. E. Seed.
- PI 538143 donor id: ORS 2941. origin: Egypt. collector id: HRI 97. latitude: 25 deg. 30 min. N. longitude: 030 deg. 30 min. E. Seed.
- PI 538144 donor id: ORS 2942. origin: Egypt. collector id: HRI 105. latitude: 25 deg. 30 min. N. longitude: 029 deg. 00 min. E. Seed.
- PI 538145 donor id: ORS 2943. origin: Egypt. collector id: HRI 110. latitude: 25 deg. 00 min. N. longitude: 030 deg. 30 min. E. Seed.
- PI 538146 donor id: ORS 2944. origin: Egypt. collector id: HRI 117. latitude: 28 deg. 00 min. N. longitude: 031 deg. 00 min. E. Seed.
- PI 538147 donor id: ORS 2945. origin: Egypt. collector id: HRI 123. latitude: 28 deg. 00 min. N. longitude: 031 deg. 00 min. E. Seed.
- PI 538148 donor id: ORS 2946. origin: Egypt. collector id: HRI 136. latitude: 28 deg. 30 min. N. longitude: 031 deg. 00 min. E. Seed.
- PI 538149 donor id: ORS 2947. origin: Egypt. collector id: HRI 149. latitude: 30 deg. 30 min. N. longitude: 031 deg. 00 min. E. Seed.

PI 538051 to 538161-continued

- PI 538150 donor id: ORS 2948. origin: Egypt. collector id: HRI 160. latitude: 30 deg. 30 min. N. longitude: 031 deg. 00 min. E. Seed.
- PI 538151 donor id: ORS 2949. origin: Egypt. collector id: HRI 164. latitude: 30 deg. 30 min. N. longitude: 031 deg. 00 min. E. Seed.
- PI 538152 donor id: ORS 2950. origin: Egypt. collector id: HRI 172. latitude: 30 deg. 30 min. N. longitude: 031 deg. 00 min. E. Seed.
- PI 538153 donor id: ORS 2951. origin: Egypt. collector id: HRI 183. latitude: 31 deg. 00 min. N. longitude: 031 deg. 30 min. E. Seed.
- PI 538154 donor id: ORS 2952. origin: Egypt. collector id: HRI 189. latitude: 31 deg. 00 min. N. longitude: 031 deg. 00 min. E. Seed.
- PI 538155 donor id: ORS 2953. origin: Egypt. collector id: HRI 198. latitude: 31 deg. 00 min. N. longitude: 034 deg. 00 min. E. Seed.
- PI 538156 donor id: ORS 2954. origin: Egypt. collector id: HRI 201. latitude: 31 deg. 00 min. N. longitude: 034 deg. 00 min. E. Seed.
- PI 538157 donor id: ORS 2955. origin: Egypt. collector id: HRI 216. latitude: 30 deg. 00 min. N. longitude: 031 deg. 30 min. E. Seed.
- PI 538158 donor id: ORS 2956. origin: Egypt. collector id: HRI 223. latitude: 30 deg. 00 min. N. longitude: 031 deg. 00 min. E. Seed.
- PI 538159 donor id: ORS 2957. origin: Egypt. collector id: HRI 227. latitude: 30 deg. 00 min. N. longitude: 031 deg. 00 min. E. Seed.
- PI 538160 donor id: ORS 2958. origin: Egypt. collector id: HRI 236. latitude: 30 deg. 00 min. N. longitude: 031 deg. 00 min. E. Seed.
- PI 538161 donor id: ORS 2959. origin: Egypt. collector id: HRI 237. longitude: 031 deg. 00 min. E. Seed.

- PI 538162 to 538185. Abelmoschus manihot (L.) Medikus MALVACEAE
 - Donated by: Hamon, S., Laboratoire de Genetique, Centre d'Adiopodoume, ORSTOM, Abidjan, Ivory Coast. Received June 28, 1989.
 - PI 538162 donor id: ORS 0278. origin: United States. collector id: 1191. Seed.
 - PI 538163 donor id: ORS 0592. origin: United States. Seed.
 - PI 538164 donor id: ORS 3241. origin: Thailand. collector id: HCC 17. latitude: 17 deg. 40 min. N. longitude: 101 deg. 30 min. E. Seed.
 - PI 538165 donor id: ORS 3243. origin: Thailand. collector id: HCC 19. latitude: 17 deg. 25 min. N. longitude: 102 deg. 50 min. E. Seed.
 - PI 538166 donor id: ORS 3248. origin: Thailand. collector id: HCC 24. latitude: 16 deg. 50 min. N. longitude: 103 deg. 55 min. E. Seed.
 - PI 538167 donor id: ORS 3258. origin: Thailand. collector id: HCC 37. latitude: 16 deg. 45 min. N. longitude: 098 deg. 35 min. E. Seed.
 - PI 538168 donor id: ORS 3260. origin: Thailand. collector id: HCC 39. latitude: 16 deg. 40 min. N. longitude: 098 deg. 30 min. E. Seed.
 - PI 538169 donor id: ORS 3262. origin: Thailand. collector id: HCC 41. latitude: 18 deg. 55 min. N. longitude: 098 deg. 50 min. E. Seed.
 - PI 538170 donor id: ORS 3263. origin: Thailand. collector id: HCC 42. latitude: 18 deg. 55 min. N. longitude: 098 deg. 45 min. E. Seed.
 - PI 538171 donor id: ORS 3264. origin: Thailand. collector id: HCC 44. latitude: 18 deg. 50 min. N. longitude: 098 deg. 45 min. E. Seed.
 - PI 538172 donor id: ORS 3265. origin: Thailand. collector id: HCC 45. latitude: 18 deg. 50 min. N. longitude: 098 deg. 45 min. E. Seed.
 - PI 538173 donor id: ORS 3266. origin: Thailand. collector id: HCC 46. latitude: 18 deg. 45 min. N. longitude: 098 deg. 55 min. E. Seed.
 - PI 538174 donor id: ORS 3267. origin: Thailand. collector id: HCC 47. latitude: 18 deg. 45 min. N. longitude: 098 deg. 50 min. E. Seed.

PI 538162 to 538185-continued

- PI 538175 donor id: ORS 3268. origin: Thailand. collector id: HCC 48. latitude: 18 deg. 50 min. N. longitude: 098 deg. 50 min. E. Seed.
- PI 538176 donor id: ORS 3270. origin: Thailand. collector id: HCC 50. latitude: 18 deg. 30 min. N. longitude: 098 deg. 25 min. E. Seed.
- PI 538177 donor id: ORS 3271. origin: Thailand. collector id: HCC 51. latitude: 18 deg. 30 min. N. longitude: 098 deg. 25 min. E. Seed.
- PI 538178 donor id: ORS 3273. origin: Thailand. collector id: HCC 53. latitude: 18 deg. 23 min. N. longitude: 098 deg. 25 min. E. Seed.
- PI 538179 donor id: ORS 3274. origin: Thailand. collector id: HCC 54. latitude: 18 deg. 20 min. N. longitude: 098 deg. 25 min. E. Seed.
- PI 538180 donor id: ORS 3276. origin: Thailand. collector id: HCC 59. latitude: 18 deg. 10 min. N. longitude: 097 deg. 55 min. E. Seed.
- PI 538181 donor id: ORS 3277. origin: Thailand. collector id: HCC 60. latitude: 18 deg. 25 min. N. longitude: 097 deg. 55 min. E. Seed.
- PI 538182 donor id: ORS 3281. origin: Thailand. collector id: HCC 66. latitude: 19 deg. 25 min. N. longitude: 098 deg. 20 min. E. Seed.
- PI 538183 donor id: ORS 3285. origin: Thailand. collector id: HCC 70. latitude: 19 deg. 30 min. N. longitude: 098 deg. 32 min. E. Seed.
- PI 538184 donor id: ORS 3288. origin: Thailand. Seed.
- PI 538185 donor id: ORS 3290. origin: Thailand. collector id: HCC 75. latitude: 19 deg. 35 min. N. longitude: 099 deg. 10 min. E. Seed.
- PI 538186 to 538227. Abelmoschus moschatus Medikus MALVACEAE
 - Donated by: Hamon, S., Laboratoire de Genetique, Centre d'Adiopodoume, ORSTOM, Abidjan, Ivory Coast. Received June 28, 1989.
 - PI 538186 donor id: ORS 0280. origin: United States. collector id: 1193. Seed.

- PI 538187 donor id: ORS 3230. origin: Thailand. collector id: HCC 03. latitude: 14 deg. 30 min. N. longitude: 099 deg. 10 min. E. Seed.
- PI 538188 donor id: ORS 3231. origin: Thailand. collector id: HCC 04. latitude: 14 deg. 30 min. N. longitude: 099 deg. 10 min. E. Seed.
- PI 538189 donor id: ORS 3232. origin: Thailand. collector id: HCC 06. latitude: 14 deg. 40 min. N. longitude: 099 deg. 05 min. E. Seed.
- PI 538190 donor id: ORS 3233. origin: Thailand. collector id: HCC 08. latitude: 14 deg. 50 min. N. longitude: 099 deg. 10 min. E. Seed.
- PI 538191 donor id: ORS 3234. origin: Thailand. collector id: HCC 09. latitude: 14 deg. 20 min. N. longitude: 100 deg. 40 min. E. Seed.
- PI 538192 donor id: ORS 3235. origin: Thailand. collector id: HCC 10. latitude: 14 deg. 30 min. N. longitude: 100 deg. 50 min. E. Seed.
- PI 538193 donor id: ORS 3236. origin: Thailand. collector id: HCC 11. latitude: 14 deg. 45 min. N. longitude: 101 deg. 20 min. E. Seed.
- PI 538194 donor id: ORS 3237. origin: Thailand. collector id: HCC 12. latitude: 14 deg. 45 min. N. longitude: 101 deg. 20 min. E. Seed.
- PI 538195 donor id: ORS 3239. origin: Thailand. collector id: HCC 15. latitude: 17 deg. 20 min. N. longitude: 101 deg. 50 min. E. Seed.
- PI 538196 donor id: ORS 3240. origin: Thailand. collector id: HCC 16. latitude: 17 deg. 40 min. N. longitude: 101 deg. 35 min. E. Seed.
- PI 538197 donor id: ORS 3242. origin: Thailand. collector id: HCC 18. latitude: 17 deg. 35 min. N. longitude: 101 deg. 25 min. E. Seed.
- PI 538198 donor id: ORS 3244. origin: Thailand. collector id: HCC 20. latitude: 17 deg. 50 min. N. longitude: 102 deg. 50 min. E. Seed.
- PI 538199 donor id: ORS 3245. origin: Thailand. collector id: HCC 21. latitude: 17 deg. 50 min. N. longitude: 102 deg. 50 min. E. Seed.

PI 538186 to 538227-continued

- PI 538200 donor id: ORS 3246. origin: Thailand. collector id: HCC 22. latitude: 17 deg. 50 min. N. longitude: 102 deg. 50 min. E. Seed.
- PI 538201 donor id: ORS 3247. origin: Thailand. collector id: HCC 23. latitude: 16 deg. 50 min. N. longitude: 103 deg. 55 min. E. Seed.
- PI 538202 donor id: ORS 3249. origin: Thailand. collector id: HCC 25. latitude: 14 deg. 55 min. N. longitude: 103 deg. 10 min. E. Seed.
- PI 538203 donor id: ORS 3250. origin: Thailand. collector id: HCC 26. latitude: 14 deg. 35 min. N. longitude: 102 deg. 45 min. E. Seed.
- PI 538204 donor id: ORS 3252. origin: Thailand. collector id: HCC 28. latitude: 14 deg. 10 min. N. longitude: 101 deg. 50 min. E. Seed.
- PI 538205 donor id: ORS 3253. origin: Thailand. collector id: HCC 29. latitude: 13 deg. 50 min. N. longitude: 100 deg. 35 min. E. Seed.
- PI 538206 donor id: ORS 3254. origin: Thailand. collector id: HCC 30. latitude: 17 deg. 40 min. N. longitude: 101 deg. 30 min. E. Seed.
- PI 538207 donor id: ORS 3255. origin: Thailand. collector id: HCC 31. latitude: 15 deg. 35 min. N. longitude: 099 deg. 30 min. E. Seed.
- PI 538208 donor id: ORS 3256. origin: Thailand. collector id: HCC 32. latitude: 16 deg. 10 min. N. longitude: 099 deg. 15 min. E. Seed.
- PI 538209 donor id: ORS 3257. origin: Thailand. collector id: HCC 33. latitude: 16 deg. 50 min. N. longitude: 098 deg. 50 min. E. Seed.
- PI 538210 donor id: ORS 3275. origin: Thailand. collector id: HCC 58. latitude: 18 deg. 10 min. N. longitude: 097 deg. 55 min. E. Seed.
- PI 538211 donor id: ORS 3280. origin: Thailand. collector id: HCC 65. latitude: 19 deg. 25 min. N. longitude: 098 deg. 20 min. E. Seed.
- PI 538212 donor id: ORS 3291. origin: Thailand. collector id: HCC 76. latitude: 19 deg. 40 min. N. longitude: 099 deg. 15 min. E. Seed.

- PI 538213 donor id: ORS 3292. origin: Thailand. collector id: HCC 77. latitude: 19 deg. 30 min. N. longitude: 099 deg. 05 min. E. Seed.
- PI 538214 donor id: ORS 3293. origin: Thailand. collector id: HCC 78. latitude: 13 deg. 55 min. N. longitude: 100 deg. 30 min. E. Seed.
- PI 538215 donor id: ORS 3370. origin: UNKNOWN. Seed.
- PI 538216 donor id: ORS 3380. origin: Thailand. collector id: HCC 64. latitude: 19 deg. 30 min. N. longitude: 098 deg. 05 min. E. Seed.
- PI 538217 donor id: ORS 3419. origin: Maldives. collector id: KLM 1774. latitude: 06 deg. 45 min. N. longitude: 073 deg. 02 min. E. Seed.
- PI 538218 donor id: ORS 3420. origin: Maldives. collector id: KLM 1851. latitude: 02 deg. 57 min. N. longitude: 073 deg. 34 min. E. Seed.
- PI 538219 donor id: ORS 3421. origin: Maldives. collector id: KLM 1859. latitude: 02 deg. 07 min. N. longitude: 073 deg. 35 min. E. Seed.
- PI 538220 donor id: ORS 3422. origin: Maldives. collector id: KLM 1887. latitude: 01 deg. 50 min. N. longitude: 073 deg. 31 min. E. Seed.
- PI 538221 donor id: ORS 3423. origin: Maldives. collector id: KLM 1902. latitude: 00 deg. 51 min. N. longitude: 073 deg. 08 min. E. Seed.
- PI 538222 donor id: ORS 3424. origin: Maldives. collector id: KLM 1935. latitude: 00 deg. 17 min. N. longitude: 073 deg. 23 min. E. Seed.
- PI 538223 donor id: ORS 3425. origin: Maldives. collector id: KLM 1944. latitude: 00 deg. 14 min. N. longitude: 073 deg. 13 min. E. Seed.
- PI 538224 donor id: ORS 3426. origin: Maldives. collector id: KLM 1967. latitude: 00 deg. 37 min. S. longitude: 073 deg. 06 min. E. Seed.
- PI 538225 donor id: ORS 3427. origin: Maldives. collector id: KLM 1977. latitude: 00 deg. 40 min. S. longitude: 073 deg. 07 min. E. Seed.

- PI 538186 to 538227-continued
 - PI 538226 donor id: ORS 3428. origin: Maldives. collector id: KLM 1984. latitude: 00 deg. 18 min. S. longitude: 073 deg. 26 min. E. Seed.
 - PI 538227 donor id: ORS 3429. origin: Maldives. collector id: KLM 1985. latitude: 00 deg. 18 min. S. longitude: 073 deg. 26 min. E. Seed.
- PI 538228 to 538232. Zea mays L. POACEAE Corn

Donated by: Wicks, Z.W., South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State University, Brookings, South Dakota, United States. remarks: Five Maize Parental Lines. Received February 16, 1990.

- PI 538228 Zea mays L. subsp. mays POACEAE Corn origin: United States. origin institute: South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State University, Brookings, South Dakota 57007. cultivar: SD50. pedigree: W153R*10(yellow dent inbred)/SD316W(white dent). other id: PL-138. source: Crop Sci. 30(5):1171 1990. group: CSR-MAIZE. remarks: Cultivar with good stalk and root strength and average vigor. Plant height 60cm. Ear height 30cm. Cobs red with 12 rows of flint kernels. Husk looseness average. Maturity AES300 (95 days). Annual. Breeding Material. Seed.
- PI 538229 Zea mays L. subsp. mays POACEAE Corn origin: United States. origin institute: South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State University, Brookings, South Dakota 57007. cultivar: SD53. pedigree: A632*10(yellow dent inbred)/SD316W(white dent). other id: PL-139. source: Crop Sci. 30(5):1171 1990. group: CSR-MAIZE. remarks: Cultivar with good stalk and root strength and vigor. Plant height 168cm. Ear height 99cm. Cobs white with 14 rows of dent kernels. Husk looseness good. Maturity AES 300 (110 days). Annual. Breeding Material. Seed.
- PI 538230 Zea mays L. subsp. mays POACEAE Corn origin: United States. origin institute: South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State University, Brookings, South Dakota 57007. cultivar: SD55. pedigree: ND248*10(yellow dent inbred)/SD316W(white dent). other id: PL-140. source: Crop Sci. 30(5):1171 1990. group: CSR-MAIZE. remarks: Cultivar with good stalk and root strength and vigor. Plant height 120cm. Ear height 61cm. Cobs red with 12 rows of dent kernels. Husk looseness good. Maturity AES 200 (80 days). Annual. Breeding Material. Seed.

- PI 538231 Zea mays L. subsp. mays POACEAE Corn origin: United States. origin institute: South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State Univ., Brookings, South Dakota 57007. cultivar: SD59. pedigree: A619*10(yellow dent inbred)/SD316W(white dent). other id: PL-141. source: Crop Sci. 30(5):1171 1990. group: CSR-MAIZE. remarks: Cultivar with good root and stalk strength and vigor. Plant height 132cm. Ear height 41cm. Cobs white with 12 rows of dent kernels. Husk looseness good. Maturity AES 400 (105 days). Annual. Breeding Material. Seed.
- PI 538232 Zea mays L. subsp. mays POACEAE Corn origin: United States. origin institute: South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State Univ., Brookings, South Dakota 57007. cultivar: SD73. pedigree: SD33*10(yellow dent inbred(/SD316W(white dent). other id: PL-142. source: Crop Sci. 30(5):1171 1990. group: CSR-MAIZE. remarks: Cultivar with good stalk and root strength and vigor. Plant height 157cm. Ear height 94cm. Cobs white with 16 rows of flint kernels. Husk looseness good. Maturity AES 400 (110 days). Annual. Breeding Material. Seed.
- PI 538233 to 538239. Zea mays L. subsp. mays POACEAE Corn

Donated by: Wicks, Z.W., South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State University, Brookings, South Dakota, United States. remarks: Seven Maize Parental Lines. Received February 16, 1990.

PI 538233 origin: United States. origin institute: South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State University, Brookings, South Dakota 57007. cultivar: SD54. pedigree: ND247*10(yellow dent inbred)/SD316W(white dent). other id: PL-143. source: Crop Sci. 30(5):1170 1990. group: CSR-MAIZE. remarks: Cultivar with good stalk and root strength and average vigor. Plant height 122cm Ear height 36cm. Cobs white with 12 rows of flint kernels. Husk looseness average. Maturity AES 200 (85 days). Annual. Breeding Material. Seed.

- PI 538234 origin: United States. origin institute: South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State University, Brookings, South Dakota 57007. cultivar: SD56. pedigree: ND250*10(yellow dent inbred)/SD316W(white dent). other id: PL-144. source: Crop Sci. 30(5):1170 1990. group: CSR-MAIZE. remarks: Cultivar with good root and stalk strength and vigor. Plant height 127cm. Ear height 46cm. Cobs white with 14 rows of dent kernels. Husk looseness good. Maturity AES 200 (95 days). Annual. Breeding Material. Seed.
- PI 538235 origin: United States. origin institute: South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State University, Brookings, South Dakota 57007. cultivar: SD57. pedigree: ND251*10(yellow dent inbred/SD 316W(white dent). other id: PL-145. source: Crop Sci. 30(5):1170 1990. group: CSR-MAIZE. remarks: Cultivar with good stalk and root strength and average vigor. Plant height 82cm. Plant height 42cm. Cobs red with 14 rows of flint kernels. Husk looseness good. Maturity AES 200 (85 days). Annual. Breeding Material. Seed.
- PI 538236 origin: United States. origin institute: South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State Univ., Brookings, South Dakota 57007. cultivar: SD60. pedigree: W64A*10(yellow dent inbred)/SD316W(white dent). other id: PL-146. source: Crop Sci. 30(5):1170 1990. group: CSR-MAIZE. remarks: Cultivar with good stalk and root strength and vigor. Plant height 104cm. Ear height 48cm. Cobs light red with 7 rows of flint kernels. Husk looseness good. Maturity AES 400 (95 days). Annual. Breeding Material. Seed.
- PI 538237 origin: United States. origin institute: South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State University, Brookings, South Dakota 57007. cultivar: SD63. pedigree: CM105*10(yellow dent inbred)/SD316W(white dent). other id: PL-147. source: Crop Sci. 30(5):1170 1990. group: CSR-MAIZE. remarks: Cultivar with good stalk and root strength and vigor. Plant height 120cm. Ear height 44cm. Cobs white with 14 rows of flint kernels. Husk looseness good. Maturity AES 300 (90 days). Annual. Breeding Material. Seed.

- PI 538238 origin: United States. origin institute: South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State University, Brookings, South Dakota 57007. cultivar: SD65. pedigree: A654*10(yellow dent inbred)/SD316W(white dent). other id: PL-148. source: Crop Sci. 30(5):1170 1990. group: CSR-MAIZE. remarks: Cultivar with good stalk and root strength and vigor. Plant height 122cm. Ear height 48cm. Cobs white with 14 rows of dent kernels. Husk looseness good. Maturity AES 300 (90 days). Annual. Breeding Material. Seed.
- PI 538239 origin: United States. origin institute: South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State University, Brookings, South Dakota 57007. cultivar: SD69. pedigree: A655*10(yellow dent inbred)/SD316W(white dent). other id: PL-149. source: Crop Sci. 30(5):1170 1990. group: CSR-MAIZE. remarks: Cultivar with good stalk and root strength and vigor. Plant height 107cm. Ear height 48cm. Cobs red with 14 rows of flint kernels. Husk looseness good. Maturity AES 400 (95 days). Annual. Breeding Material. Seed.
- PI 538240 to 538244. Zea mays L. subsp. mays POACEAE Corn

Donated by: Wicks, Z.W., South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State University, Brookings, South Dakota, United States. remarks: Five Maize Germplasm Lines. Received February 16, 1990.

- PI 538240 origin: United States. origin institute: South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State University, Brookings, South Dakota 57007. cultivar: SD104. pedigree: W182B*10(yellow dent inbred)/SD316W(white dent). other id: GP-218. source: Crop Sci. 30(5):1167 1990. group: CSR-MAIZE. remarks: Cultivar with good stalk and root strength and average vigor. Plant height 92cm. Ear height 28cm. Cobs red with 12 rows of flint kernels. Husk looseness good. Maturity AES AES 300 (90 days). Annual. Breeding Material. Seed.
- PI 538241 origin: United States. origin institute: South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State University, Brookings, South Dakota 57007. cultivar: SD105. pedigree: Wl17*10(yellow dent inbred)/SD316W(white dent). other id: GP-219. source: Crop Sci. 30(5):l167 1990. group: CSR-MAIZE. remarks: Cultivar with good stalk and root strength and average vigor. Plant height 112cm. Ear height 58cm. Cobs red with 14 rows of flint kernels. Husk looseness good. Maturity AES 300 (95 days). Annual. Breeding Material. Seed.

- PI 538242 origin: United States. origin institute: South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State University, Brookings, South Dakota 57007. cultivar: SD106. pedigree: A641*10(yellow dent inbred)/SD316W(white dent). other id: GP-220. source: Crop Sci. 30(5):1167 1990. group: CSR-MAIZE. remarks: Cultivar with good stalk and root strength and average vigor. Plant height 112cm. Ear height 58cm. Cobs red with 14 rows of flint kernels.Husk looseness good. Maturity AES 400 (85 days). Annual. Breeding Material. Seed.
- PI 538243 origin: United States. origin institute: South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State University, Brookings, South Dakota 57007. cultivar: SD107. pedigree: A634*10(yellow dent inbred)/SD316W(white dent). other id: GP-221. source: Crop Sci. 30(5):1167 1990. group: CSR-MAIZE. remarks: Cultivar with good stalk and root strength and vigor. Plant height 158cm. Ear height 91cm. Cobs white with 14 rows of dent kernels. Husk looseness good. Maturity AES 400 (110 days). Annual. Breeding Material. Seed.
- PI 538244 origin: United States. origin institute: South Dakota Agr. Exp. Sta., Plant Science Dept., South Dakota State University, Brookings, South Dakota 57007. cultivar: SD108. pedigree: B73*10(yellow dent inbred)/SD316W(white dent). other id: GP-222. source: Crop Sci. 30(5):1167 1990. group: CSR-MAIZE. remarks: Cultivar with good stalk and root strength. Plant height 160cm. Ear height 99cm. Cobs red with 16 rows of flint kernels. Husk looseness good. Maturity AES 600 (120 days). Annual. Breeding Material. Seed.
- PI 538245. Sorghum bicolor (L.) Moench POACEAE Sorghum

Donated by: Duncan, R.R., Georgia Agr. Exp. Sta., University of Georiga, Dept. of Agronomy, Griffin, Georgia, United States; and Agricultural Research Service -- USDA. remarks: GPP5BR Anthracnose Resistant Sorghum Germplasm. Received February 26, 1990.

PI 538245-continued

origin: United States. origin institute: Georgia Agr. Exp. Sta., University of Georgia, Dept. of Agronomy, Griffin, Georgia 30223-1797. cultivar: GPP5BR(M/H/F)C3. pedigree: Developed from cross pollination of 25 germplasm sources with male sterile GPT2RB anthracnose (Colletotrichum graminicola) resistant population. 5 pollinator lines of GPTM3BR and GTPP7R were infused into the new population. other id: GP-315. source: Crop Sci. 31(1):241 1991. group: CSR-SORGHUM. remarks: Germplasm with anthracnose resistance, variable seed and plant morphological characteristics, and larger combined-height than predecessor GPT2RB. Tolerance to pink seed mold (Fusarium moniliforme). Adapted to subtropical and tropical enviroments. Annual. Cultivar. Seed.

PI 538246. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: Meyer, W.A., Pure-Seed Testing, Inc., 3057 G Street, Hubbard, Oregon, United States; and New Jersey Agr. Exp. Sta.; and Turf-Seed, Inc.. remarks: Apache Tall Fescue. Received February 26, 1990.

origin: United States. origin institute: Pure-Seed Testing, Inc., P.O. Box 449, Hubbard, Oregon 97032. cultivar: APACHE. pedigree: Advanced generation synthetic resulting from three cycles of recurrent phenotypic selection. other id: PVP 8400143. source: Certificate in force. group: PVPO. other id: CV-43. group: CSR-FESCUE. remarks: Turf with very good heat, cold, wear, and shade tolerance. Plants moderately low-growing, vigorous, dense, and medium dark green color. Resistance to leaf spot (Drechslera dictyoides f. sp. dictyoides). Perennial. Cultivar. Seed.

PI 538247. Festuca longifolia Thuill. POACEAE Hard fescue

Donated by: Meyer, W.A., Pure-Seed Testing, Inc., 3057 G Street, Hubbard, Oregon, United States; and New Jersey Agr. Exp. Sta.; and Turf-Seed, Inc.. remarks: Aurora Hard Fescue. Received February 26, 1990.

PI 538247-continued

origin: United States. origin institute: Pure-Seed Testing, Inc., P.O. Box 449, Hubbard, Oregon 97032. cultivar: AURORA. pedigree: Advanced synthetic cultivar tracing back to 17 powdery mildew (Erysiphe graminis) resistant plants from old turfs of the Northeastern U.S. and cultivars Biljart and Scaldis using 3 cycles of phenotypic recurrent selection. other id: PVP 8600070. source: Certificate in force. group: PVPO. other id: AEH-10. other id: AEH-80. remarks: Turf-type cultivar with early maturity, good density, color, and seed yield production. Resistance to dollar spot (Sclerotinia homoeocarpa), red thread (Laitisaria fusicformis), leaf rust (Puccinia crandallii), pink snnow mold (Gerlachia hivalis) and leaf spot (Drechslera spp.). Recommended for turf use and reclamation projects in shade to full sun where little mowing is done. Perennial. Cultivar. Seed.

PI 538248. Oryza sativa L. POACEAE Rice

Donated by: Bollich, C.N., Agricultural Research Service -- USDA, Texas Rice Improvement Association, Route 7, Box 999, Beaumont, Texas, United States; and Texas Agr. Exp. Sta.. remarks: Maybelle Rice. Received February 27, 1990.

origin: United States. origin institute: Agricultural Research Service -- USDA, Texas A&M Univ. Agric. Res. & Ext. Ctr, Beaumont, Texas 77713. cultivar: MAYBELLE. pedigree: Skybonnet/L201. other id: CV-86. group: CSR-RICE. remarks: Maturity very early. Long grain with high main crop and superior ratoon crop yielding ability. Averages 100cm in height and 81 days from seedling to heading. Spikelet straw-colored, glabrous, awnless, and apiculus purple. Non-aromatic. High-amylose, intermediate gelatinizing type. Susceptible to U.S. races of Pyricularia and sheath blight (Rhizoctonia ssp.) but more tolerant than Skybonnet. Spring Annual. Cultivar. Seed.

PI 538249. Oryza sativa L. POACEAE Rice

Donated by: Bollich, C.N., Agricultural Research Service -- USDA, Texas Rice Improvement Association, Route 7, Box 999, Beaumont, Texas, United States. Received February 27, 1990.

PI 538249-continued

origin: United States. cultivar: TEXMONT. pedigree: RU8303116/Lemont. remarks: Maturity very early. Long grain, semidwarf with superior ratooning ability. Doubled haploid developed through anther culture. Average height 87cm and 81 days from seeding to heading. Spikelet straw-colored, glabrous, awned, and apiculus purple. High amylose, intermediate gelantinizing type. Non-aromatic. Susceptible to U.S. races of Pyricularia and straighthead. Very susceptible to sheath blight. Spring Annual. Cultivar. Seed.

PI 538250. Beta vulgaris L. CHENOPODIACEAE Sugarbeet

Donated by: Lewellen, R.T., Agricultural Research Service -- USDA, U.S. Agricultural Research Station, 1636 E. Alisal Street, Salinas, California, United States; and Beet Sugar Development Foundation; and California Beet Growers Association. remarks: C28 Beta Vulgaris Germplasm. Received February 26, 1990.

origin: United States. origin institute: Agricultural Research Service -- USDA, U.S. Agricultural Research Station, 1636 E. Alisal Street, Salinas, California 93905. cultivar: C28. pedigree: Rhizomania (BNYVV) resistant selection (C37)/PI 206407. other id: GP-132. source: Crop Sci. 31(1):244 1991. group: CSR-SUGARBEET. remarks: Multigerm and self-sterile. Roots fangy. Segregates for resistance to rhizomania (BNYVV). Biennial. Breeding Material. Seed.

PI 538251. Beta vulgaris subsp. maritima (L.) Arcang. CHENOPODIACEAE

Donated by: Lewellen, R.T., Agricultural Research Service -- USDA, U.S. Agricultural Research Station, 1636 E. Alisal Street, Salinas, California, United States. Received February 26, 1990.

origin: United States. cultivar: C48. pedigree: C37 rhizomania resistant/3/C37/2/C37/Beta maritima (WB 41 and WB 42). remarks: Multigerm, self-sterile. Roots somewhat fangy and fibrous. Sugar concentrate fair. Moderately resistant to rhizomania (BNYVV). Biennial. Cultivar. Seed.

PI 538252. Poa pratensis L. POACEAE Kentucky bluegrass

Donated by: Hurley, R.H., Lofts Seed, Inc., P.O. Box 146, Bound Brook, New Jersey, United States; and New Jersey Agr. Exp. Sta.. remarks: 1757 Kentucky Bluegrass. Received February 26, 1990.

PI 538252-continued

origin: United States. origin institute: New Jersey Agr. Exp. Sta., New Jersey. cultivar: LOFTS 1757. pedigree: Brunswick/Anheuser Dwarf. other id: PVP 8800230. source: Pending. group: PVPO. other id: CV-44. source: Crop Sci. 30(6):1358 1990. group: CSR-BLUEGRASS. remarks: Turf-type cultivar, moderately low-growing, persistent, of medium density and aggressiveness. Leaves medium-wide. Useful in lawn-type turfs in blends of Kentucky bluegrass and mixtures of pernnial ryegrass and fine fescues where light varies from full sun to moderate shade. Resistant to leaf rust (Puccinia brachypodii var. poae nemoralis), stem rust (Puccinia graminis subsp. graminicola), stripe smut. Cultivar. Seed.

PI 538253. Oryza sativa L. POACEAE Rice

Donated by: Moldenhauer, K.A.K., Arkansas Agr. Exp. Sta., Univ. of Arkansas Rice Res. & Ext. Ctr., P.O. Box 351, Stuttgart, Arkansas, United States; and Agricultural Research Service -- USDA. remarks: Alan Rice. Received July 04, 1990.

origin: United States. origin institute: Univ. of Arkansas Rice Res. & Ext. Ctr., P.O. Box 351, Stuttgart, Arkansas 72160. cultivar: ALAN. pedigree: Labelle/L201. other id: CV-83. source: Crop Sci. 31(1):229 1991. group: CSR-RICE. other id: RU8701084. remarks: Long grain type. Yield high. Height 104cm. Maturity 111 days. Plants green at maturity. Angle flag leaves erect to 45 deg. Glabrous lemma, palea, and leaf blades. Grain may have purple or colorless apiculi and tip awns at maturity. Hulls straw colored. Seed coat light brown. Susceptible to Pyricularia oryzae and Rhizoctonia solani. Spring Annual. Cultivar. Seed.

PI 538254. Oryza sativa L. POACEAE Rice

Donated by: Moldenhauer, K.A.K., Arkansas Agr. Exp. Sta., Univ. of Arkansas Rice Res. & Ext. Ctr., P.O. Box 351, Stuttgart, Arkansas, United States; and Agricultural Research Service -- USDA. remarks: Millie Rice. Received July 04, 1990.

PI 538254-continued

origin: United States. origin institute: Univ. of Arkansas Rice Res. & Ext. Ctr., P.O. Box 351, Stuttgart, Arkansas 72160. cultivar: MILLIE. pedigree: Lebonnet/L201. other id: CV-84. source: Crop Sci. 31(1):229 1991. group: CSR-RICE. other id: RU8701105. remarks: Long grain type. Height 104cm. Maturity 117 days. Angle flag leaves erect. Glabrous lemma, palea, and leaf blades. Grain large, may have colorless or purple apiculi and tip awns at maturity. Hulls straw colored. Seed coat light bronw. Milling yields are 65% whole kernel; 73% total milled. Moderately susceptable to Sheath blight (Rhizoctonia solani). Spring Annual. Cultivar. Seed.

PI 538255. Amaranthus cruentus L. AMARANTHACEAE Amaranth

Donated by: Schulz-Schaeffer, J., Montana Agr. Exp. Station, Montana State University, Dept. of Plant & Soil Science, Bozeman, Montana, United States. remarks: Amont Grain Amaranth. Received March 06, 1990.

origin: United States. origin institute: Montana Agr. Res. Sta., Montana State University, Dept. of Plant and Soil Sci., Bozeman, Montana 59717-0002. cultivar: AMONT. pedigree: RRC-A-369/RRC-1015/RRC-1041/MT-3. other id: CV-2. group: CSR-MISC CROP. remarks: First grain amaranth released adapted to Montana growing conditions. Proten content high. Extremely high levels of amino acids lysine, methionine, and cystine. Well suited for flour blends. High levels of dietary fiber and calcium. Maturity 122 days. Plant height 198cm under irrigated conditions. Grain color white. Test weight 81.1 kg per hectare. Annual. Cultivar. Seed.

PI 538256. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: Brede, A.D., Jacklin Seed Company, W. 5300 Riverbend Avenue, Post Falls, Idaho, United States; and New Jersey Agr. Exp. Sta.. remarks: Wrangler Tall Fescue. Received March 06, 1990.

PI 538256-continued

origin: United States. origin institute: Jacklin Seed Company, West 5300 Riverbend Avenue, Post Falls, Idaho 83854. cultivar: WRANGLER. pedigree: Ten parental clones (PC) of Wrangler trace maternally to plants selected from T-6 tall fescue. Two PC were selected from maternal progenies of plants obtained from old turfs in NJ, and one each from maternal progenies in NC and AL. other id: LB-1. other id: PVP 8800083. source: Certificate in force. group: PVPO. other id: CV-41. group: CSR-FESCUE. remarks: Turf type. Medium-low growing of medium-fine leaf texture, medium high density, good summer stress tolerance, and winter hardiness. Good wear tolerance, cool temperature color retention, medium early spring greenup, and good shade tolerance. Moderate resistance to netblotch disease (Drechslera dictyoides) and brown patch disease (Rhizoctonia solani). Perennial. Cultivar. Seed.

PI 538257. Triticum aestivum L. POACEAE Common wheat

Donated by: Johnson, J.W., Georgia Agr. Exp. Sta., University of Georgia, Dept. of Agronomy, Griffin, Georgia, United States; and Agricultural Research Service -- USDA. remarks: Georgia 100 Soft Red Winter Wheat. Received March 06, 1990.

origin: United States. origin institute: Georgia Agr. Exp. Sta., University of Georgia, Dept. of Agronomy, Griffin, Georgia 30223-1797. cultivar: GEORGIA 100. pedigree: Omega 78/Stacy//Stacy/Tyler. other id: CV-756. group: CSR-WHEAT. remarks: Semi-dwarf, soft red winter type. Maturity mid-season. Excellent Hessian fly (Mayetiola destructor) resistance to biotypes E, G, M, O. Moderate resistance to leaf rust (Purcinia recondita) and powdery mildew (Erysiphe graminis). Moderately susceptible to septoria nodorum (Leptosphaeria nodorum). Winter Annual. Cultivar. Seed.

PI 538258. Hibiscus cannabinus L. MALVACEAE Kenaf

Donated by: Jinda, Jan-Orn, Field Crops Research Institute, Department of Agriculture, Bangkok, Thailand. remarks: Received through J. Veech, Southern Crops Research Lab., USDA-ARS, Route 5, Box 805, College Station, Texas 77840, Released in 1987 by Khon Kaen Field Crops Research Centre, Department of Agriculture. Received November 10, 1989.

PI 538258-continued

origin: Thailand. origin institute: Non Sung Field Crops Experiment Station, Nakhon Ratchasima,. cultivar: KHON KAEN 60. pedigree: Salvador/70-4-139. local name: Cuban kenaf. remarks: Plants 1.8-2.6m tall, thornless. Stems yellowish, reddish green, 1.37cm diameter. Flowers yellow with purple style. Leaves 7-lobed with some spines. Seed weight 28.5g/100. Fertilizer application response good. Plant before rice in very early rainy season. Cultivar. Seed.

PI 538259 to 538260. Hibiscus sabdariffa L. MALVACEAE Roselle

Donated by: Jinda, Jan-Orn, Field Crops Research Institute, Department of Agriculture, Bangkok, Thailand. remarks: Released in 1984. Received through J. Veech, Southern Crops Research Lab., USDA-ARS, Route 5, Box 805, College Station, Texas 77840. Received November 10, 1989.

- PI 538259 origin: Thailand. origin institute: Non Sung Field Crops Experiment Station, Nakhon Ratchasima. cultivar: NON SUNG 2. pedigree: Collar rot resistant selection from red stem/green stem variety crosses. local name: Thai kenaf. other id: NS 7308-32-2. remarks: Plants 2.78m tall. Stems green, thornless, 1.21cm in diameter with some hairs. Leaves five-lobed with hairy petioles. Flowers yellow with yellow stigma. Seed capsule green. Seeds roundish, black, shatter easily. Seed weight 2.1g/100. Cultivar. Seed.
- PI 538260 origin: Thailand. cultivar: KIEO-YAI. local name: Thai kenaf. remarks: Plants 2.8m tall. Stems and petioles greenish red. Midrib vein red. Flowers yellow with red interior. Fruit capsules green-red, large. Cultivar. Seed.
- PI 538261 to 538263. Ipomoea abrupta R. Br. CONVOLVULACEAE

Donated by: Jarret, R. L., USDA-ARS, Southern Regional PI Station, 1109 Experiment Street, Griffin, Georgia, United States. Received June 26, 1989.

- PI 538261 origin: Australia. locality: Entrance to Marmakala Trail, Kakadu National Park, Arnhem Highway. Wild. Seed.
- PI 538262 Ipomoea macrantha Roemer & Schultes CONVOLVULACEAE origin: Australia. locality: Gunn Point, South Beach, Darwin. Wild. Seed.

- PI 538261 to 538263-continued
 - PI 538263 donor id: 7543. origin: Australia. collector id: 7543. locality: 1.7km S of Earl's Creek Crossing, Peninsula Developmental Road. Wild. Seed.
- PI 538264 to 538265. Ipomoea argillicola R. W. Johnson CONVOLVULACEAE

Donated by: Jarret, R. L., USDA-ARS, Southern Regional PI Station, 1109 Experiment Street, Griffin, Georgia, United States. Received June 26, 1989.

- PI 538264 donor id: 7531. origin: Australia. collector id: 7531. locality: 3 km W of Hughenden, Flinders Highway, Route 78. Wild. Seed.
- PI 538265 donor id: 7531a. origin: Australia. collector id: 7531a. locality: 2 km S of Hughenden on Kennedy Developmental Road. Wild. Seed.
- PI 538266 to 538267. Ipomoea costata F. Muell. ex Benth. CONVOLVULACEAE

Donated by: Jarret, R. L., USDA-ARS, Southern Regional PI Station, 1109 Experiment Street, Griffin, Georgia, United States. Received June 26, 1989.

- PI 538266 origin: Australia. cultivar: YUENDUMU. locality: Arid Zone Research Center, Alice Springs, 125km W of Stuart Highway. Wild. Seed.
- PI 538267 donor id: 7549. origin: Australia. collector id: 7549. locality: 22.2km N of Barrows Creek, Stuart Highway, Rt. 87. Wild. Seed.
- PI 538268 to 538270. Ipomoea gracilis R. Br. CONVOLVULACEAE

Donated by: Jarret, R. L., USDA-ARS, Southern Regional PI Station, 1109 Experiment Street, Griffin, Georgia, United States. Received June 26, 1989.

- PI 538268 origin: Australia. locality: Base of escarpment at Split Rock National Park, 4km S of Lara on Peninsula Developmental Road. Wild. Seed.
- PI 538269 origin: Australia. locality: Vacant lot adjacent to land of John Clarkson, Mareeba. Wild. Seed.
- PI 538270 donor id: 7544. origin: Australia. collector id: 7544. locality: 10km S of Palmer River Crossing, Peninsula Developmental Highway. Wild. Seed.

- PI 538271. Ipomoea hastifolia Domin CONVOLVULACEAE
 - **Donated by:** Jarret, R. L., USDA-ARS, Southern Regional PI Station, 1109 Experiment Street, Griffin, Georgia, United States. Received June 26, 1989.
 - donor id: 7534. origin: Australia. collector id: 7534.
 locality: East Face, Mt. Walker, 12km S of Hughendon.
 Wild. Seed.
- PI 538272 to 538274. Ipomoea muelleri Benth. CONVOLVULACEAE
 - Donated by: Jarret, R. L., USDA-ARS, Southern Regional PI Station, 1109 Experiment Street, Griffin, Georgia, United States. Received June 26, 1989.
 - PI 538272 **origin:** Australia. **locality:** 107km N of Charles River Crossing, Stuart Highway, Rt. 87. Wild. Seed.
 - PI 538273 donor id: 7547. origin: Australia. collector id: 7547. locality: 88.6km N of Charles River Crossing Stuart Highway, Rt. 87. Wild. Seed.
 - PI 538274 donor id: 7548. origin: Australia. collector id: 7548. locality: 144km N of Charles River Crossing, Stuart Highway, Rt. 87. Wild. Seed.
- PI 538275 to 538277. Ipomoea polpha R. W. Johnson CONVOLVULACEAE
 - Donated by: Jarret, R. L., USDA-ARS, Southern Regional PI Station, 1109 Experiment Street, Griffin, Georgia, United States. Received June 26, 1989.
 - PI 538275 origin: Australia. locality: Base of Ti Tree, Stirling Station, Stuart Highway, Route 87. latitude: 22 deg. 00 min. S. longitude: 133 deg. 45 min. W. remarks: Population one. Wild. Seed.
 - PI 538276 origin: Australia. locality: Base of Ti Tree, Stuart Highway, Route 87. latitude: 22 deg. 00 min. S. longitude: 133 deg. 45 min. W. remarks: Population two. Wild. Seed.
 - PI 538277 donor id: 7529. origin: Australia. collector id: 7529. locality: Jump up at Walkamin, 3.5km N on road to Mareeba. latitude: 17 deg. 06 min. S. longitude: 145 deg. 26 min. W. Wild. Seed.

PI 538278. Ipomoea saintronanensis R. W. Johnson CONVOLVULACEAE

Donated by: Jarret, R. L., USDA-ARS, Southern Regional PI Station, 1109 Experiment Street, Griffin, Georgia, United States. Received June 26, 1989.

donor id: 7527. origin: Australia. collector id: 7527.
locality: 64km to Scrub National Park, Rt. 1, south exit.
Wild. Seed.

PI 538279 to 538280. Ipomoea triloba L. CONVOLVULACEAE

Donated by: Jarret, R. L., USDA-ARS, Southern Regional PI Station, 1109 Experiment Street, Griffin, Georgia, United States. Received June 26, 1989.

PI 538279 origin: Australia. locality: Howard Springs Conservation area, Darwin. Wild. Seed.

PI 538280 donor id: 7542. origin: Australia. collector id: 7542. locality: Lara River crossing, S of Lara, Peninsula Developmental Road. Wild. Seed.

PI 538281. Operculina aequisepala (Domin) R. W. Johnson CONVOLVULACEAE

Donated by: Jarret, R. L., USDA-ARS, Southern Regional PI Station, 1109 Experiment Street, Griffin, Georgia, United States. Received June 26, 1989.

donor id: 7530. origin: Australia. collector id: 7530. locality: 2km W of Hughenden, Flinders Highway, Rt. 78. Wild. Seed.

PI 538282. Ipomoea batatas (L.) Lam. CONVOLVULACEAE Sweet potato

Donated by: Collins, W.W., Dept. of Horticultural Science, North Carolina State University, 210 Kilgore Hall, Raleigh, North Carolina, United States. Received July 19, 1989.

donor id: NP 45. origin: Peru. cultivar: BUEM POBRA. collected: March 5, 1983. collector id: W.W. Collins. other id: Q 23723. locality: Huaral Experiment Station, Huaral, Northern Peru. Cultivar. Roots.

PI 538283. Ipomoea batatas (L.) Lam. CONVOLVULACEAE Sweet potato

Donated by: Heinze, H., CATIE, Turrialba, Costa Rica. Received July 19, 1989.

donor id: 8521. origin: Costa Rica. other id: Q 23839.
Cultivated. Roots.

PI 538284. Ipomoea batatas (L.) Lam. CONVOLVULACEAE Sweet potato

Donated by: Linn, S.S.M., The Asian Vegetable Research, and Development Center, AVRDC, P.O. Box 42, Shanhua, Tainan, Taiwan. Received July 19, 1989.

donor id: CN 1028-15. origin: Taiwan. pedigree: PI344129/B 6708(OP)//I57(OP)-4. other id: Q 23872. remarks: Staple and animal feed type. Cultivated. Roots.

PI 538285 to 538305. Ipomoea batatas (L.) Lam. CONVOLVULACEAE Sweet potato

Donated by: Delgado, G.E., Universidad Nacional Pedro Ruiz Callo, Lambayaque, Peru. remarks: Received through IBPGR. Rome Italy. Received May 22, 1989.

- PI 538285 donor id: UNPRG 3. origin: Peru. local name: Papa. other id: Q 24939. locality: E.E.A. Lambayeque. Cultivated. Tissue Culture.
- PI 538286 donor id: UNPRG 12. origin: Peru. local name: Chancleta de Chilca V.F. other id: Q 24948. locality: Chil ca. remarks: Skin cream. Flesh yellow. Cultivated. Tissue Culture.
- PI 538287 donor id: UNPRG 16. origin: Peru. local name:
 Paramutay. other id: Q 24952. other id: CN.14.M.1.56.
 locality: E.E.A. Canete. remarks: Skin cream. Flesh
 yellow with orange. Cultivated. Tissue Culture.
- PI 538288 donor id: UNPRG 27. origin: Peru. local name: IAC-72 Eucaru. other id: Q 24962. locality: E.E.A. Canete. Cultivated. Tissue Culture.
- PI 538289 donor id: UNPRG 33. origin: Peru. local name: Morado. other id: Q 24968. locality: E.E.A. Canete. remarks: Skin purple. Flesh purple. Cultivated. Tissue Culture.
- PI 538290 donor id: UNPRG 39. origin: Peru. local name: Pato Iqueno. other id: Q 24974. locality: E.E.A. Canete. Cultivated. Tissue Culture.
- PI 538291 donor id: UNPRG 43. origin: Peru. local name: Porfirio. other id: Q 24978. locality: E.E.A. Canete. Cultivated. Tissue Culture.

PI 538285 to 538305-continued

- PI 538292 donor id: UNPRG 55. origin: Peru. local name: Juancho. other id: Q 24990. locality: E.E.A. Canete. Cultivated. Tissue Culture.
- PI 538293 donor id: UNPRG 58. origin: Peru. local name: Wendoly. other id: Q 24993. locality: E.E.A. Canete. Cultivated. Tissue Culture.
- PI 538294 donor id: UNPRG 66. origin: Peru. local name: Tipo 10-LM. other id: Q 25001. locality: La Molina. Cultivated. Tissue Culture.
- PI 538295 donor id: UNPRG 69. origin: Peru. local name: Yuca de Calango. other id: Q 25004. locality: Calango. remarks: Skin tan. Flesh cream. Cultivated. Tissue Culture.
- PI 538296 donor id: UNPRG 72. origin: Peru. local name: Tipo 34-LM. other id: Q 25007. locality: la Molina. Cultivated. Tissue Culture.
- PI 538297 donor id: UNPRG 73. origin: Peru. local name: Amarillo de Chilca. other id: Q 25008. locality: Chilca. Cultivated. Tissue Culture.
- PI 538298 donor id: UNPRG 74. origin: Peru. local name: Wennotz II. other id: Q 25009. locality: Canete. Cultivated. Tissue Culture.
- PI 538299 donor id: UNPRG 77. origin: Peru. local name: Zapallo de Huaura. other id: Q 25010. locality: Huaura. Cultivated. Tissue Culture.
- PI 538300 donor id: UNPRG 78. origin: Peru. local name: Papino. other id: Q 25011. locality: Huaura. Cultivated. Tissue Culture.
- PI 538301 donor id: UNPRG 80. origin: Peru. local name: Amarillo de Trujillo. other id: Q 25013. locality: Trujillo. Cultivated. Tissue Culture.
- PI 538302 donor id: UNPRG 82. origin: Peru. local name: Morado de Calango T-1. other id: Q 25015. locality: Calango. remarks: Skin cream with seconary pink. Flesh yellow with orange. Cultivated. Tissue Culture.
- PI 538303 donor id: UNPRG 86. origin: Peru. local name: Morado de Chillon. other id: Q 25017. locality: Chillon. Cultivated. Tissue Culture.

- PI 538285 to 538305-continued
 - PI 538304 donor id: UNPRG 95. origin: Peru. local name: Amarillo de Viru. other id: Q 25025. locality: Viru. Cultivated. Tissue Culture.
 - PI 538305 donor id: UNPRG 96. origin: Peru. local name: Chinchano. other id: Q 25026. locality: Chincha. remarks: Skin purple. Flesh yellow with orange. Anthocyanin in vascular cambium. Cultivated. Tissue Culture.
- PI 538306 to 538309. Ipomoea batatas (L.) Lam. CONVOLVULACEAE Sweet potato

Donated by: Gonzales, M.M., Sector Publico Agro. Y De Alimentacion, Inst. De Ciencia Y Tecnologia Agricolas, Avenida Reforma 8-60, Zona 9, Edificio, Guatemala. remarks: Received through IBPGR, Rome Italy. Received May 22, 1989.

- PI 538306 donor id: 529. origin: Guatemala. collected: August 16, 1983. other id: Q 25350. locality: Northwest of La Libertad. latitude: 16 deg. 40 min. N. longitude: 90 deg. 16 min. W. elevation: 140m. remarks: Skin orange. Flesh purple. Primtiv-cv. Roots.
- PI 538307 donor id: 540. origin: Guatemala. collected: August 16, 1983. other id: Q 25353. locality: South of Sayaxche, Peten. latitude: 16 deg. 30 min. N. longitude: 90 deg. 11 min. W. elevation: 180m. remarks: Skin purple-red. Flesh yellow. Primtiv-cv. Roots.
- PI 538308 donor id: 618. origin: Guatemala. collected: August 28, 1983. other id: Q 25361. locality: Southeast of Livingstone, Izabal. latitude: 15 deg. 51 min. N. longitude: 89 deg. 14 min. W. elevation: 40m. remarks: Skin purple. Flesh yellow with orange. Primtiv-cv. Roots.
- PI 538309 donor id: 633. origin: Guatemala. collected: August 30, 1983. other id: Q 25364. locality: Southeast of Los Amates, Izabal. latitude: 15 deg. 22 min. N. longitude: 88 deg. 58 min. W. elevation: 60m. remarks: Skin purple-red. Flesh cream. Primtiv-cv. Roots.
- PI 538310. Centrosema virginianum (L.) Benth. FABACEAE Butterfly-pea

Donated by: Michaud, M., University of Virgin Islands, St. Croix, Virgin Islands, U.S.. Received August 21, 1989.

PI 538310-continued

donor id: VI 54. origin: Virgin Islands, U.S..
collected: August 10, 1988. locality: Roadside, Udall
Point, St. Croix. remarks: Propagated Spring 1989, St.
Croix, Virgin Islands. Wild. Seed.

PI 538311. Clitoria ternatea L. FABACEAE Aparajita

Donated by: Michaud, M., University of Virgin Islands, St. Croix, Virgin Islands, U.S.. Received August 21, 1989.

donor id: VI 22. origin: Dominican Republic. collected: March 15, 1988. locality: Roadside, Route 4, km 30, 3km after San Pedro de Macoris towards Hato Mayor. remarks: Propagated Spring 1989, St. Croix, Virgin Islands. Wild. Seed.

PI 538312 to 538314. Galactia striata (Jacq.) Urban FABACEAE

Donated by: Michaud, M., University of Virgin Islands, St. Croix, Virgin Islands, U.S.. Received August 21, 1989.

- PI 538312 donor id: VI 64. origin: Dominican Republic. collected:
 March 1988. locality: Cesda, San Cristobol. remarks:
 Propagated Spring 1989, St. Croix, Virgin Islands. Wild.
 Seed.
- PI 538313 donor id: VI 65. origin: Dominican Republic. collected:
 March 15, 1988. locality: Sandy soil, lime base, 60m
 from sea, 2km from Boca Chica in direction of San Pedro
 de Macoris, highway "Las Americas". remarks: Propagated
 Spring 1989, St. Croix, Virgin Islands. Wild. Seed.
- PI 538314 donor id: VI 66. origin: Dominican Republic. collected:
 March 15, 1988. locality: Roadside, on road to
 Experiment Station, 3km outside Seibo. remarks:
 Propagated Spring 1989, St. Croix, Virgin Islands. Wild.
 Seed.
- PI 538315 to 538316. Rhynchosia minima (L.) DC. FABACEAE

Donated by: Michaud, M., University of Virgin Islands, St. Croix, Virgin Islands, U.S.. Received August 21, 1989.

PI 538315 donor id: VI 69. origin: Dominican Republic. collected:
March 14, 1988. locality: Roadside, on highway to San
Cristobol, Las Cajuilities. remarks: Propagated Spring
1989, St. Croix, Virgin Islands. Wild. Seed.

- PI 538315 to 538316-continued
 - PI 538316 donor id: VI 70. origin: Dominican Republic. collected:
 March 15, 1988. locality: Sandy soil, lime base, 60m
 from, sea, 2km from Boca Chica, in direction of San Pedro
 de Macoris, highway "Las Americas". remarks: Propagated
 Spring 1989, St. Croix, Virgin Islands. Wild. Seed.
- PI 538317 to 538318. Teramnus labialis (L. f.) Sprengel FABACEAE
 - Donated by: Michaud, M., University of Virgin Islands, St. Croix, Virgin Islands, U.S.. Received August 21, 1989.
 - PI 538317 donor id: VI 46. origin: Virgin Islands, U.S.. collected: July 14, 1988. locality: Pasture near jct at highways 58 and 765. remarks: Propagated Spring 1989, St. Croix, Virgin Islands. Associated with Digitaria decumbens (Pangola grass). Wild. Seed.
 - PI 538318 donor id: VI 50. origin: Virgin Islands, U.S.. collected: March 15, 1988. locality: Roadside, on road to Experiment Station, 3km outside Seibo. remarks: Propagated Spring 1989, St. Croix, Virgin Islands. Wild. Seed.
- PI 538319 to 538321. Amaranthus cruentus L. AMARANTHACEAE Purple amaranth
 - Donated by: Weber, L.E., Rodale Research Center, P.O. Box 323, Rural Delivery No. 1, Kutztown, Pennsylvania, United States. remarks: Released in 1990. Received February 23, 1990.
 - PI 538319 origin: United States. cultivar: K266. pedigree: RRC60 (Amaranthus cruentus)/RRC1013 (A. cruentus). remarks: Plant height 2.5m. Flowers green. Seed white. Annual. Breeding Material. Seed.
 - PI 538320 origin: United States. cultivar: K283. pedigree:
 RRC1035 (A. cruentus)/RRC1012 (A. cruentus). remarks:
 Plant height 2.lm. Flowers pink or red. Seed white.
 Annual. Breeding Material. Seed.
 - PI 538321 origin: United States. cultivar: K436. pedigree:
 RRC1035 (A. cruentus)/RRC1012 (A. cruentus). remarks:
 Plant height 2.3m. Flowers red. Seed white. Annual.
 Breeding Material. Seed.

PI 538322 to 538327. Amaranthus hybrid AMARANTHACEAE

- Donated by: Weber, L.E., Rodale Research Center, P.O. Box 323, Rural Delivery No. 1, Kutztown, Pennsylvania, United States. remarks: Released in 1990. Received February 23, 1990.
- PI 538322 origin: United States. developer country: United States. cultivar: K343. pedigree: RRC1004 (A. hybridus)/RRC1023 (A. hypochondriacus). other id: Ames 8271. remarks: Plant height 2.0m. Flowers red. Seed white. Annual. Breeding Material. Seed.
- PI 538323 origin: United States. cultivar: K432. pedigree: RRC386 (A. hybridus)/RRC51 (A. hypochondriacus). remarks: Plant height 1.5m. Flowers green or pink. Seed white. Annual. Breeding Material. Seed.
- PI 538324 origin: United States. cultivar: K433. pedigree: RRC386 (A. hybridus)/RRC51 (A. hypochondriacus). remarks: Plant height 1.5m. Flowers green. Seed white. Annual. Breeding Material. Seed.
- PI 538325 origin: United States. cultivar: K593. pedigree:
 RRC1023 (A.hypochondriacus)/SP153 (A. hybridus)/2/RRC1023
 (A. hypochondriacus). remarks: Plant height 2.0m.
 Flowers red. Seed white. Annual. Breeding Material.
 Seed.
- PI 538326 origin: United States. cultivar: D70-1. pedigree:
 RRC1024 (A.hypochondriacus)/RRC27 (A. cruentus)/2/RRC1023
 (A. hypochondriacus)/SP153 (A. hybridus). remarks: Plant height 2.0m. Flowers red. Seed white. Annual. Breeding Material. Seed.
- PI 538327 origin: United States. cultivar: D136-1. pedigree:
 RRC51 (A. hypochondriacus)/RRC386 (A. hybridus)/2/RRC1023
 (A. hypochondriacus)/RRC892 (A. caudatus). remarks:
 Plant height 1.8m. Flowers pink. Seed white. Annual.
 Breeding Material. Seed.
- PI 538328. Indigofera hirsuta L. FABACEAE Hairy indigo

Donated by: Baltensperger, D.D., Florida Agr. Exp. Sta., Agronomy Dept., Univ. of Florida, IFAS, 304 Newell Hall, Gainesville, Florida, United States. remarks: Flamingo Hairy Indigo. Received March 16, 1990.

PI 538328-continued

origin: United States. origin institute: Florida Agr. Exp. Sta., Agronomy Dept., Univ. of Florida, IFAS, 304 Newell Hall, Gainesville, Florida 32611. cultivar: FLAMINGO. pedigree: Selected out of PI 213523 from India. other id: FL-44. other id: CV-86. source: Crop Sci. 30(6):1366 1990. group: CSR-OTHER LEGUMES. remarks: White pubescence as opposed to mixed white and reddish brown for the common ecotypes. Leaflets are nearly double the size of FL-24. Lighter pink in flower color and has extremely low levels of hard seed compared with common hairy indigo. In yield trails it has been similar to higher yielding than common. Annual. Cultivar. Seed.

PI 538329. Alysicarpus vaginalis (L.) DC. FABACEAE Alyceclover

Donated by: Baltensperger, D.D., Florida Agr. Exp. Sta., Agronomy Dept., Univ. of Florida, IFAS, 304 Newell Hall, Gainesville, Florida, United States; and Agricultural Research Service -- USDA; and Soil Conservation Service -- USDA. remarks: FL-3 Alyceclover. Received March 16, 1990.

origin: United States. origin institute: Florida Agr. Exp. Sta., Agronomy Dept., Univ. of Florida, IFAS, 304 Newell Hall, Gainesville, Florida 32611. cultivar: FL-3. pedigree: Inbred line selected out of CPI. No. 37616. Considered A. ovalifolius by some, but grouped with A. vaginatis by most taxonomist. other id: CV-87. source: Crop Sci. 30(6):1367 1990. group: CSR-OTHER LEGUMES. remarks: Resistant or tolerant to several root-knot nematode species. Larger seeded than common alyceclover and has much higher leaf-length to leaf-width ratio. Improved seedling vigor and higher yielding than common in root-knot infested conditions. Annual. Cultivar. Seed.

PI 538330. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: Winsett, B.L., FFR Cooperative, 4112 E. State Road, 225, W. Lafayette, Indiana, United States. remarks: Phyter Tall Fescue. Received March 16, 1990.

PI 538330-continued

origin: United States. origin institute: FFR
Cooperative, 4112 East State Road 225, W. Lafayette,
Indiana 47906. cultivar: PHYTER. pedigree: Eleven
clone synthetic. Parents all trace back to selections out
of old Ky-31 seed fields. Clonal numbers are: 79.044,
79.048, 79.061, 79.063, 79.074, 79.077, 79.079, 79.080,
79.082, 79.083, and 79.086. other id: PVP 8800076.
source: Certificate in force. group: PVPO. other id:
CV-42. group: CSR-FESCUE. remarks: Low endophyte hay
and pasture use variety with excellent forage yields.
Higher moisture content than KY-31 in summer regrowth
herbage with translates into higher palatability.
Maturity medium, similar in heading date to KY-31.
Perennial. Cultivar. Seed.

PI 538331. Dactylis glomerata L. POACEAE Orchardgrass

Donated by: Winsett, B.L., FFR Cooperative, 4112 E. State Road, 225, W. Lafayette, Indiana, United States. remarks: Benchmark Orchardgrass. Received March 16, 1990.

origin: United States. origin institute: FFR
Cooperative, 4112 East State Road 225, W. Lafayette,
Indiana 47906. cultivar: BENCHMARK. pedigree: Twelve
clone synthetic. Clonal numbers are: 79.001, 79.067,
79.151, 79.185, 79.192, 80.322, 80,336, 80.337, 80.338,
80.353, 80.374, and 80.387. Clone selections out of IN &
VA selection nurseries and old FFR yield trials. other
id: PVP 9000010. source: Pending. group: PVPO. other
id: CV-140. group: CSR-OTHER GRASSES. remarks: Hay and
pasture variety. Parents selected on basis of good vigor,
stem rust (Puccinia graminis) resistance and improved
forage yield. Maturity early, similar in heading date to
Hallmark and Potomac. Perennial. Cultivar. Seed.

PI 538332. Avena sp. POACEAE

Donated by: Metzger, R.J., USDA-ARS, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received December 19, 1988.

origin: Yemen Arab Republic. collected: October 16, 1988. locality: Wheat plot, Dhamar. remarks: Seeds somewhat immature, many green. Primtiv-cv. Seed.

PI 538333. Lotus corniculatus L. FABACEAE Birdsfoot trefoil

Donated by: Metzger, R.J., USDA-ARS, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received December 19, 1988.

donor id: 88YAR002-004. origin: Yemen Arab Republic. collected: October 20, 1988. locality: Research Station, YAR Range & Livestock Improvement project, high plateau, 20km N of Dhamar. latitude: 15 deg. N. elevation: 2100m. remarks: Donated by Klaas Fokkema. Plants vigorous. Flowers abundant in October. Potentially daylength insensitive. Accession traces back a few years ago to a wild collection. Used for green forage or pasture. Cultivated. Seed.

PI 538334 to 538336. Medicago sativa L. FABACEAE Alfalfa

Donated by: Metzger, R.J., USDA-ARS, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received December 19, 1988.

- PI 538334 donor id: 88YAR002-001. origin: Yemen Arab Republic. cultivar: REIMANA. collected: October 20, 1988. locality: Research Station, YAR Range & Livestock Improvement project, high plateau, 20km N of Dhamar. elevation: 2100m. remarks: Donated by Klaas Fokkema. Ancient type introduced by the Romans. Landrace. Seed.
- PI 538335 donor id: 88YAR002-002. origin: Yemen Arab Republic. cultivar: KAULI. collected: October 20, 1988. locality: Research Station, YAR Range & Livestock Improvement project, high plateau, 20km N of Dhamar. elevation: 2100m. remarks: Donated by Klaas Fokkema. Landrace. Seed.
- PI 538336 donor id: 88YAR002-003. origin: Yemen Arab Republic. cultivar: BAHDI (BARDI). collected: October 20, 1988. locality: Research Station, YAR Range & Livestock Improvement project, high plateau, 20km N of Dhamar. elevation: 2100m. remarks: Donated by Klaas Fokkema. Primtiv-cv. Seed.
- PI 538337. Sorghum bicolor (L.) Moench POACEAE Sorghum

Donated by: Metzger, R.J., USDA-ARS, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received December 19, 1988.

PI 538337-continued

donor id: 88YAR001-002. origin: Yemen Arab Republic. collected: October 11, 1988. locality: Hilly slope, loam soil, Maslika village, farmstore, 1 km NE of TAIZ. elevation: 1300m. remarks: Seeds presented by a farmer. Maturity 6 months. Primtiv-cv. Seed.

PI 538338 to 538341. Zea mays L. subsp. mays POACEAE Corn

Donated by: Metzger, R.J., USDA-ARS, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received December 19, 1988.

- PI 538338 donor id: 88YAR001-001. origin: Yemen Arab Republic.
 local name: Khumultar. collected: October 11, 1988.
 locality: Hoban village, 1 km NE of TAIZ. elevation:
 1700m. remarks: Originally from Nepal. Used as fodder.
 Landrace. Seed.
- PI 538339 donor id: 88YAR001-001A. origin: Yemen Arab Republic. local name: Khumultar. collected: October 11, 1988. locality: Hoban village, 1 km NE of TAIZ. elevation: 1300m. remarks: Originally from Nepal. Used as fodder. Landrace. Seed.
- PI 538340 donor id: 88YAR003-001. origin: Yemen Arab Republic. cultivar: TAIZ 2. collected: October 25, 1988. locality: ARA headquarters, TAIZ. elevation: 1300m. remarks: O.P. synthetic introduced from CIAT about 10 years ago. Kernels yellow or dark blue, some with distinct blue dots. Used for feed grain and fodder. Primtiv-cv. Seed.
- PI 538341 origin: Yemen Arab Republic. local name: Khamultar. locality: Maslika. remarks: Seeds immature, shriveled, small. Introduced from Nepal. Primtiv-cv. Seed.
- PI 538342 to 538354. Ipomoea batatas (L.) Lam. CONVOLVULACEAE Sweet potato

Donated by: Martin, F. W., Tropical Agric. Research Station, P.O. Box 70, Mayaguez, Puerto Rico. Received May 19, 1989.

- PI 538342 donor id: SPV 42. origin: Puerto Rico. cultivar: WART. other id: SPT-7. locality: Mayaguez. Cultivated. Tissue Culture.
- PI 538343 donor id: SPV 43. origin: Puerto Rico. cultivar: SUNNY. other id: SPT-11. locality: Mayaguez. remarks: Skin orange. Flesh yellow with orange. Cultivated. Tissue Culture.

PI 538342 to 538354-continued

- PI 538344 donor id: SPV 44. origin: Puerto Rico. cultivar:
 PAPOTA. other id: SPT-18. locality: Mayaguez. remarks:
 Skin cream. Flesh white. Cultivar. Tissue Culture.
- PI 538345 donor id: SPV 49. origin: Puerto Rico. cultivar:
 MACANA. other id: SPT-40. locality: Mayaguez. remarks:
 Skin purple-red. Flesh yellow. Cultivated. Tissue
 Culture.
- PI 538346 donor id: SPV 51. origin: Puerto Rico. cultivar: FRITA. other id: SPT-12. remarks: Skin and flesh cream. Cultivated. Tissue Culture.
- PI 538347 donor id: SPV 55. origin: Solomon Islands. cultivar: TOQUECITA. other id: HES 36. Cultivated. Tissue Culture.
- PI 538348 donor id: SPV 56. origin: Solomon Islands. cultivar: VIOLA. other id: HES 40. remarks: Skin purple-red. Flesh cream. Cultivated. Tissue Culture.
- PI 538349 donor id: SPV 61. origin: Puerto Rico. cultivar: BUGSBUNNY. other id: HES 51. locality: Mayaguez. remarks: Skin red. Flesh cream. Cultivated. Tissue Culture.
- PI 538350 donor id: SPV 63. origin: Puerto Rico. cultivar: FRANCIA. other id: HES 57. locality: Mayaguez. Cultivated. Tissue Culture.
- PI 538351 donor id: SPV 65. origin: Puerto Rico. cultivar: MOJAVE. other id: HES 63. locality: Mayaguez. Cultivated. Tissue Culture.
- PI 538352 donor id: SPV 67. origin: Puerto Rico. cultivar: PEPA
 DE ORO. other id: HES 72. locality: Mayaguez. remarks:
 Skin orange. Flesh orange. Cultivated. Tissue Culture.
- PI 538353 donor id: SPV 68. origin: Puerto Rico. cultivar: AMANECER. other id: HES 76. Cultivated. Tissue Culture.
- PI 538354 donor id: SPV 71. origin: Puerto Rico. cultivar: TAPATO. other id: HES 99. locality: Mayaguez. Cultivated. Tissue Culture.

Donated by: Gritton, E.T., Wisconsin Agr. Exp. Sta., Dept. of Agronomy, Univ. of Wisconsin, 1575 Linden Drive, Madison, Wisconsin, United States. remarks: Five Processing Pea Germplasm Lines. Received March 08, 1990.

- PI 538355 origin: United States. origin institute: Wisconsin Agr. Exp. Sta., Dept. of Agronomy, Univ. of Wisconsin, 1575 Linden Drive, Madison, Wisconsin 53706. cultivar: WIS 8901 RR. pedigree: CSC8615/MN494/2/MN108/B275-191 F4/3/CSC8615. other id: GP-78. source: Crop Sci. 30(5):1166 1990. group: CSR-PEA. remarks: Tolerance to pea root rot (Aphanomyces euteiches). Seed wrinkled, green. Vines large. Spring Annual. Breeding Material. Seed.
- PI 538356 origin: United States. origin institute: Wisconsin Agr. Exp. Sta., Dept. of Agronomy, Univ. of Wisconsin, 1575 Linden Drive, Madison, Wisconsin 53706. cultivar: WIS 8902 RR. pedigree: CSC8615/MN108 F3le/2/CSC8615. other id: GP-79. source: Crop Sci. 30(5):1166 1990. group: CSR-PEA. remarks: Tolerance to pea root rot (Aphanomyces euteiches). Seed wrinkled, green. Vines large. Spring Annual. Breeding Material. Seed.
- PI 538357 origin: United States. origin institute: Wisconsin Agr. Exp. Sta., Dept. of Agronomy, Univ. of Wisconsin, 1575 Linden Drive, Madison, Wisconsin 53706. cultivar: WIS 8903 RR. pedigree: CSC8617/MN108/2*3/MN494/NY5 F4/3/C8617. other id: GP-80. source: Crop Sci. 30(5):1166 1990. group: CSR-PEA. remarks: Tolerance to pea root rot (Aphanomyces euteiches). Seed wrinkled, green. Vines large. Spring Annual. Breeding Material. Seed.
- PI 538358 origin: United States. origin institute: Wisconsin Agr. Exp. Sta., Dept. of Agronomy, Univ. of Wisconsin, 1575 Linden Drive, Madison, Wisconsin 53706. cultivar: WIS 8904 RR. pedigree: CSC8617/MN108/2/MN494/NY5 F4/3/NLEP af er. other id: GP-81. source: Crop Sci. 30(5):1166 1990. group: CSR-PEA. remarks: Tolerance to pea root rot (Aphanomyces euteiches). Seed wrinkled, green. Vines large. Spring Annual. Breeding Material. Seed.
- PI 538359 origin: United States. origin institute: Wisconsin Agr. Exp. Sta., Dept. of Agronomy, Univ. of Wisconsin, 1575 Linden Drive, Madison, Wisconsin 53706. cultivar: WIS 8905 RR. pedigree: CSC8617/MN108/2/MN494/NY5 F4/3/CSC8617. other id: GP-82. source: Crop Sci. 30(5):1166 1990. group: CSR-PEA. remarks: Tolerance to pea root rot (Aphanomyces euteiches). Seed wrinkled, green. Vines large. Spring Annual. Breeding Material. Seed.

- PI 538360 to 538374. Sorghum bicolor (L.) Moench POACEAE Sorghum
 - Donated by: Atkins, R.E., Iowa Agric. and Home Econ. Exp. Station, Dept. of Agronomy, Iowa State University, Ames, Iowa, United States. remarks: Sorghum A and B-Line Inbreds (IA77-IA91). Received March 08, 1990.
 - PI 538360 origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Dept. of Agronomy, Iowa State Univ., Ames, Iowa 50011. cultivar: IA77. pedigree: A3Tx3197 x B3 Martin (SA398), BC4 generation. other id: PL-208. source: Crop Sci. 30(6):1377 1990. group: CSR-SORGHUM. other id: 88AH2001. remarks: Parental lines provide additional cytoplasmic and genetic diversity. Breeding Material. Seed.
 - PI 538361 origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Dept. of Agronomy, Iowa State Univ., Ames, Iowa 50011. cultivar: IA78. pedigree: A3Tx3197 x B3 Redbine 58, BC4 generation. other id: PL-209. source: Crop Sci. 30(6):1377 1990. group: CSR-SORGHUM. other id: 88AH2002. remarks: Parental lines provide additional cytoplasmic and genetic diversity. Breeding Material. Seed.
 - PI 538362 origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Dept. of Agronomy, Iowa State Univ., Ames, Iowa 50011. cultivar: IA79. pedigree: A3Tx3197 x B3 Wheatland (SA399), BC4 generation. other id: PL-210. source: Crop Sci. 30(6):1377 1990. group: CSR-SORGHUM. other id: 88AH2003. remarks: Parental lines provide additional cytoplasmic and genetic diversity. Breeding Material. Seed.
 - PI 538363 origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Dept. of Agronomy, Iowa State Univ., Ames, Iowa 50011. cultivar: IA80. pedigree: A3Tx3197 x B3 KS 24, BC4 generation. other id: PL-211. source: Crop Sci. 30(6):1377 1990. group: CSR-SORGHUM. other id: 88AH2004. remarks: Parental lines provide additional cytoplasmic and genetic diversity. Breeding Material. Seed.
 - PI 538364 origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Dept. of Agronomy, Iowa State Univ., Ames, Iowa 50011. cultivar: IA81. pedigree: A3Tx3197 x B3 Dwarf Redlan, Tx2749, BC4 generation. other id: PL-212. source: Crop Sci. 30(6):1377 1990. group: CSR-SORGHUM. other id: 88AH2006. remarks: Parental lines provide additional cytoplasmic and genetic diversity. Breeding Material. Seed.

- PI 538365 origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Dept. of Agronomy, Iowa State Univ., Ames, Iowa 50011. cultivar: IA82. pedigree: A3Tx3197 x B3 IA38, BC4 generation. other id: PL-213. source: Crop Sci. 30(6):1377 1990. group: CSR-SORGHUM. other id: 88AH2007. remarks: Parental lines provide additional cytoplasmic and genetic diversity. Breeding Material. Seed.
- PI 538366 origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Dept. of Agronomy, Iowa State Univ., Ames, Iowa 50011. cultivar: IA83. pedigree: A3Tx3197 x B3 IA39, BC4 generation. other id: PL-214. source: Crop Sci. 30(6):1377 1990. group: CSR-SORGHUM. other id: 88AH2008. remarks: Parental lines provide additional cytoplasmic and genetic diversity. Breeding Material. Seed.
- PI 538367 origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Dept. of Agronomy, Iowa State Univ., Ames, Iowa 50011. cultivar: IA84. pedigree: A3Tx3197 x B3 Tx3197, BC4 generation. other id: PL-215. source: Crop Sci. 30(6):1377 1990. group: CSR-SORGHUM. other id: 88AH2009. remarks: Parental lines provide additional cytoplasmic and genetic diversity. Breeding Material. Seed.
- PI 538368 origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Dept. of Agronomy, Iowa State Univ., Ames, Iowa 50011. cultivar: IA85. pedigree: A4Tx398 x B4 Martin (SA398), BC3 generation. other id: PL-216. source: Crop Sci. 30(6):1377 1990. group: CSR-SORGHUM. other id: 88AH2010. remarks: Parental lines provide additional cytoplasmic and genetic diversity. Breeding Material. Seed.
- PI 538369 origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Dept. of Agronomy, Iowa State Univ., Ames, Iowa 50011. cultivar: IA86. pedigree: A4Tx398 x B4 Redbine 58, BC3 generation. other id: PL-217. source: Crop Sci. 30(6):1377 1990. group: CSR-SORGHUM. other id: 88AH2012. remarks: Parental lines provide additional cytoplasmic and genetic diversity. Breeding Material. Seed.

PI 538360 to 538374-continued

- PI 538370 origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Dept. of Agronomy, Iowa State Univ., Ames, Iowa 50011. cultivar: IA87. pedigree: A4Tx398 x B4 Wheatland (SA399), BC3 generation. other id: PL-218. source: Crop Sci. 30(6):1377 1990. group: CSR-SORGHUM. other id: 88AH2013. remarks: Parental lines provide additional cytoplasmic and genetic diversity. Breeding Material. Seed.
- PI 538371 origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Dept. of Agronomy, Iowa State Univ., Ames, Iowa 50011. cultivar: IA88. pedigree: A4Tx398 x B4 KS 24, BC3 generation. other id: PL-219. source: Crop Sci. 30(6):1377 1990. group: CSR-SORGHUM. other id: 88AH2015. remarks: Parental lines provide additional cytoplasmic and genetic diversity. Breeding Material. Seed.
- PI 538372 origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Dept. of Agronomy, Iowa State Univ., Ames, Iowa 50011. cultivar: IA89. pedigree: A4Tx398 x B4 Dwarf Redlan, TX2749, BC3 generation. other id: PL-220. source: Crop Sci. 30(6):1377 1990. group: CSR-SORGHUM. other id: 88AH2017. remarks: Parental lines provide additional cytoplasmic and genetic diversity. Breeding Material. Seed.
- PI 538373 origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Dept. of Agronomy, Iowa State Univ., Ames, Iowa 50011. cultivar: IA90. pedigree: A4Tx398 x B4 IA38, BC3 generation. other id: PL-221. source: Crop Sci. 30(6):1377 1990. group: CSR-SORGHUM. other id: 88AH2018. remarks: Parental lines provide additional cytoplasmic and genetic diversity. Breeding Material. Seed.
- PI 538374 origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Dept. of Agronomy, Iowa State Univ., Ames, Iowa 50011. cultivar: IA91. pedigree: A4Tx398 x B4 IA39, BC3 generation. other id: PL-222. source: Crop Sci. 30(6):1377 1990. group: CSR-SORGHUM. other id: 88AH2019. remarks: Parental lines provide additional cytoplasmic and genetic diversity. Breeding Material. Seed.

- PI 538375 to 538387. Glycine max (L.) Merr. FABACEAE Soybean
 - Donated by: Cheng, Dongcai, Foreign Affairs Office of Hebei Province, Shijiazhuang, China. remarks: Received through Iowa State University from the Science and Technology, Public Health, and Friendship Delegation to the state of Iowa from Hebei Province, People's Republic of China, August 1986. Received February 28, 1990.
 - PI 538375 origin: China. cultivar: BAI MAO DOU. locality: Chengde region. Cultivar. Seed.
 - PI 538376 origin: China. cultivar: DA BEI MEI DOU. locality: Qianan region. Cultivar. Seed.
 - PI 538377 origin: China. cultivar: NIOU MAO HUANG. locality: Guangping region. Cultivar. Seed.
 - PI 538378 origin: China. cultivar: PING DING HUANG. locality: Rengiu region. Cultivar. Seed.
 - PI 538379 origin: China. cultivar: SI JIAO QI HEI DOU. locality: Pingxang region. Cultivar. Seed.
 - PI 538380 origin: China. cultivar: SI JIAO QI HUANG DOU. locality: Quzhou region. Cultivar. Seed.
 - PI 538381 origin: China. cultivar: WU JI DA HUANG DOU. locality: Wuji region. Cultivar. Seed.
 - PI 538382 origin: China. cultivar: XIAO BIAN HEI DOU. locality: Zhuolu region. Cultivar. Seed.
 - PI 538383 origin: China. cultivar: XIAO HEI DOU. locality: Qinghe region. Cultivar. Seed.
 - PI 538384 origin: China. cultivar: XIAO JIN YUAN HUANG DOU. locality: Baxian region. Cultivar. Seed.
 - PI 538385 origin: China. cultivar: YI WO HOU HUANG DOU. locality: Longyao region. Cultivar. Seed.
 - PI 538386 origin: China. cultivar: 1886. Cultivar. Seed.
 - PI 538387 origin: China. cultivar: TIE FENG 19. Cultivar. Seed.
- PI 538388 to 538391. Glycine max (L.) Merr. FABACEAE Soybean
 - Donated by: Tanimura, Yoshimitsu, Hokkaido Prefect. Plant Genetic Res. Ctr, Minami Takinokawa, Takikawa, Hokkaido, Japan. Received February 16, 1990.

- PI 538388 to 538391-continued
 - PI 538388 origin: Japan. cultivar: EARLY BROWN. remarks: May be equal to PI 14954 (Early Brown) that was lost. Cultivar. Seed.
 - PI 538389 origin: Japan. cultivar: JET. remarks: May be equal to PI 17861 (Jet) that was lost. Cultivar. Seed.
 - PI 538390 origin: Japan. cultivar: MIKADO. remarks: May be equal to Indiana farmer selection "Mikado" that was lost. Cultivar. Seed.
 - PI 538391 origin: Japan. cultivar: NIGRA. remarks: Probably not equal to PI 22407 (Nigra) that was lost. Cultivar. Seed.
- PI 538392 to 538400. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Institute of Crop Germplasm Resources, Chinese Academy of Agricultural Sciences, 30 Bai Shi Qiao Road, Beijing, China. Received February 28, 1990.

- PI 538392 origin: China. cultivar: AN TU DANG DI HEI DOU. Cultivar. Seed.
- PI 538393 origin: China. cultivar: JILIN NO. 1. Cultivar. Seed.
- PI 538394 origin: China. cultivar: JILIN NO. 6. Cultivar. Seed.
- PI 538395 origin: China. cultivar: JILIN NO. 13. Cultivar. Seed.
- PI 538396 origin: China. cultivar: JUI NONG NO. 1. Cultivar. Seed.
- PI 538397 origin: China. cultivar: JUI NONG NO. 2. Cultivar. Seed.
- PI 538398 origin: China. cultivar: JUI NONG NO. 8. Cultivar. Seed.
- PI 538399 origin: China. cultivar: JUI NONG NO. 9. Cultivar. Seed.
- PI 538400 origin: China. cultivar: SI PING TOU. Cultivar. Seed.
- PI 538401 to 538402. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Shanmugasundaram, S., Asian Vegetable Res. & Dev. Ctr., (AVRDC), P.O. Box 42, Shanhua, Tainan, Taiwan. remarks: Received through Yun-Tzu Kiang, Department of Plant Science, University of New Hampshire. Received February 28, 1990.

- PI 538401 to 538402-continued
 - PI 538401 origin: Taiwan. cultivar: AV 62. pedigree: AVRDC breeding line (AGS 62) from SRF 400/PI 297550. Breeding Material. Seed.
 - PI 538402 origin: Taiwan. cultivar: AV 68. other id: AVRDC line G 68. other id: Chung Hsing No. 1. remarks: Released by National Chung Hsing University. Breeding Material. Seed.
- PI 538403 to 538410. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Konovsky, J.C., Dept. of Agronomy and Soils, Washington State University, Pullman, Washington, United States. **remarks:** Originally obtained from Sakate Seed Co. in Japan. Received February 28, 1990.

- PI 538403 origin: Japan. cultivar: KEGON. Cultivar. Seed.
- PI 538404 origin: Japan. cultivar: NATSUNOKA. Cultivar. Seed.
- PI 538405 origin: Japan. cultivar: OOSODEFURI. Cultivar. Seed.
- PI 538406 origin: Japan. cultivar: SAPPORO-MIDORI. Cultivar. Seed.
- PI 538407 origin: Japan. cultivar: SHIROFUMI. Cultivar. Seed.
- PI 538408 origin: Japan. cultivar: SHIROFUSA. Cultivar. Seed.
- PI 538409 origin: Japan. cultivar: SHIRONAMAI. Cultivar. Seed.
- PI 538410 origin: Japan. cultivar: TENGAMINE. Cultivar. Seed.
- PI 538411. Glycine soja Siebold & Zucc. FABACEAE Wild soybean

Donated by: VIR, 44 Herzen Street, Leningrad, USSR. Received February 28, 1990.

donor id: VIR-9051. origin: USSR. other id: L-556. locality: Amur region. Wild. Seed.

PI 538412. Avena sativa L. POACEAE Common oat

Donated by: Sorrells, M., Cornell University, Dept. of Plant Breeding, Ithaca, New York, United States. Received January 08, 1991.

PI 538412-continued

origin: United States. origin institute: Cornell University Agr. Exp. Sta., Cornell University, Dept. of Plant Breeding, Ithaca, New York 14850. cultivar: N.Y. OAT COMPOSITE I. pedigree: Composite developed by annual recycling of processed seeds of surviving genotypes of spring oats. other id: GP-6. source: Crop Sci. 14(4):612 1974. group: CSR-OAT. remarks: Source of crown rust resistant lines for testing and use either as parents or a released variety. Spring Annual. Breeding Material. Seed.

PI 538413. Pennisetum glaucum (L.) R. Br. POACEAE Pearl millet

Donated by: Hanna, W.W., Agricultural Research Service -- USDA, Georgia Coastal Plain Experiment Sta., P.O. Box 748, Tifton, Georgia, United States; and Georgia Agr. Exp. Sta.. remarks: Tift #2 S-1 Pearl Millet Germplasm. Received March 20, 1990.

origin: United States. origin institute: Agricultural Research Service -- USDA, Georgia Coastal Plain Experiment Sta., P.O. Box 748, Tifton, Georgia cultivar: TIFT #2 S-1. pedigree: Bulk of equal quanitites of seed from 740 accessions, most of which originiated in Africa. other id: GP-25. source: Crop Sci. 30(6):1376 1990. group: CSR-MILLET, PEARL. remarks: Valuable source of both dominant and recessive qualitative genes. Many recessive genes of agronomic and genetic interests should be expressed in this cross-pollinated crop as a result of selfing. In random sample of 300 plants, plant height and inflorescence length ranged from 90 to 370cm and 15 to 66cm, respectively, as examples of morphological variation present in this germplasm mix. Spring Annual. Cultivar. Seed.

PI 538414. Avena sativa L. POACEAE Common oat

Donated by: Kibite, S., Lacombe Res. Sta. -- Agriculture Canada, Lacombe Research Sta., Bag Service 5000, Lacombe, Alberta, Canada. remarks: Waldern Oat. Received March 20, 1990.

PI 538414-continued

origin: Canada. origin institute: Agriculture Canada, Lacombe Research Station, Bag Service 5000, Lacombe, Alberta TOC 150. cultivar: WALDERN. pedigree: Gemini/Cascade. other id: LAO-403-106. other id: CV-325. source: Crop Sci. 31(1):228 1991. group: CSR-OAT. remarks: Yield high. Kernels plump, large. Lodging resistance good. Resistant to Victoria blight. Moderately susceptible to barley yellow dwarf virus (BYDV) and smut. Susceptible to oat crown rust and oat stem rust. Spring Annual. Cultivar. Seed.

PI 538415 to 538522. Triticum araraticum Jakubz. POACEAE

Donated by: Waines, J.G., Dept. of Botany & Plant Sciences, Univ. of California, Riverside, California, United States. Received January 26, 1990.

- PI 538415 donor id: G2190. origin: Iraq. collected: 1972. locality: 1 km northeast of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538416 donor id: G2192. origin: Iraq. collected: 1972.
 locality: 1 km northeast of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.
- PI 538417 donor id: G2194. origin: Iraq. collected: 1972. locality: 1 km northeast of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538418 donor id: G2195. origin: Iraq. collected: 1972.
 locality: 1 km northeast of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.
- PI 538419 donor id: G2200. origin: Iraq. collected: 1972.
 locality: 1 km northeast of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.
- PI 538420 donor id: G2201. origin: Iraq. collected: 1972. locality: 1 km northeast of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538421 donor id: G2209. origin: Iraq. collected: 1972.
 locality: 1 km northeast of Salahaden. elevation: 1100m.
 Annual. Wild. Seed.
- PI 538422 donor id: G2210. origin: Iraq. collected: 1972.
 locality: 1 km northeast of Salahaden. elevation: 1100m.
 Annual. Wild. Seed.

- PI 538423 donor id: G2216. origin: Iraq. collected: 1972. locality: 1 km northeast of Salahaden. elevation: 1100m. Annual. Wild. Seed.
- PI 538424 donor id: G2241. origin: Iraq. collected: 1972. locality: 2 km northwest of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538425 donor id: G2243. origin: Iraq. collected: 1972. locality: 2 km northwest of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538426 donor id: G2245. origin: Iraq. collected: 1972. locality: 2 km northwest of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538427 donor id: G2250. origin: Iraq. collected: 1972. locality: 2 km northwest of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538428 donor id: G2251. origin: Iraq. collected: 1972.
 locality: 2 km northwest of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.
- PI 538429 donor id: G2254. origin: Iraq. collected: 1972. locality: 2 km northwest of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538430 donor id: G2256. origin: Iraq. collected: 1972. locality: 2 km northwest of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538431 donor id: G2265. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538432 donor id: G2270. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538433 donor id: G2274. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538434 donor id: G2277. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538435 donor id: G2278. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.

- PI 538436 donor id: G2280. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538437 donor id: G2281. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538438 donor id: G2302. origin: Iraq. collected: 1972. locality: 7 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538439 donor id: G2303. origin: Iraq. collected: 1972. locality: 7 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538440 donor id: G2305. origin: Iraq. collected: 1972. locality: 7 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538441 donor id: G2318. origin: Iraq. collected: 1972. locality: 21 km south of Harir. elevation: 1000m. Annual. Wild. Seed.
- PI 538442 donor id: G2320. origin: Iraq. collected: 1972. locality: 21 km south of Harir. elevation: 1000m. Annual. Wild. Seed.
- PI 538443 donor id: G2322. origin: Iraq. collected: 1972. locality: 21 km south of Harir. elevation: 1000m. Annual. Wild. Seed.
- PI 538444 donor id: G2325. origin: Iraq. collected: 1972. locality: 21 km south of Harir. elevation: 1000m. Annual. Wild. Seed.
- PI 538445 donor id: G2354. origin: Iraq. collected: 1972. locality: 13 km west of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538446 donor id: G2382. origin: Iraq. collected: 1972. locality: 24 km northeast of Dohuk towards Amadiya. elevation: 950m. Annual. Wild. Seed.
- PI 538447 donor id: G2384. origin: Iraq. collected: 1972. locality: 24 km northeast of Dohuk towards Amadiya. elevation: 950m. Annual. Wild. Seed.
- PI 538448 donor id: G2423. origin: Iraq. collected: 1972. locality: east of Suara Tuka; 3-4 km west of Mazorka Gorge. elevation: 1150m. Annual. Wild. Seed.

- PI 538449 donor id: G2424. origin: Iraq. collected: 1972. locality: east of Suara Tuka; 3-4 km west of Mazorka Gorge. elevation: 1150m. Annual. Wild. Seed.
- PI 538450 donor id: G2428. origin: Iraq. collected: 1972. locality: east of Suara Tuka; 3-4 km west of Mazorka Gorge. elevation: 1150m. Annual. Wild. Seed.
- PI 538451 donor id: G2429. origin: Iraq. collected: 1972. locality: east of Suara Tuka; 3-4 km west of Mazorka Gorge. elevation: 1150m. Annual. Wild. Seed.
- PI 538452 donor id: G2430. origin: Iraq. collected: 1972. locality: east of Suara Tuka; 3-4 km west of Mazorka Gorge. elevation: 1150m. Annual. Wild. Seed.
- PI 538453 donor id: G2432. origin: Iraq. collected: 1972. locality: east of Suara Tuka; 3-4 km west of Mazorka Gorge. elevation: 1150m. Annual. Wild. Seed.
- PI 538454 donor id: G2454. origin: Iraq. collected: 1972. locality: between Zawita and Suara Tuka. Annual. Wild. Seed.
- PI 538455 donor id: G2475. origin: Iraq. collected: 1972. locality: 43 km northwest of Sulaimaniya near Surdash. elevation: 800m. Annual. Wild. Seed.
- PI 538456 donor id: G2484. origin: Iraq. collected: 1972. locality: 44 km northwest of Sulaimaniya. elevation: 700m. Annual. Wild. Seed.
- PI 538457 donor id: G2495. origin: Iraq. collected: 1972. locality: 19 km east of Sulaimaniya towards Chuarta. elevation: 1050m. Annual. Wild. Seed.
- PI 538458 donor id: G2496. origin: Iraq. collected: 1972. locality: 19 km east of Sulaimaniya towards Chuarta. elevation: 1050m. Annual. Wild. Seed.
- PI 538459 donor id: G2497. origin: Iraq. collected: 1972. locality: 19 km east of Sulaimaniya towards Chuarta. elevation: 1050m. Annual. Wild. Seed.
- PI 538460 donor id: G2532. origin: Iran. collected: 1972. locality: 9 km northwest of Kermanshah. elevation: 1400m. Annual. Wild. Seed.
- PI 538461 donor id: G2558. origin: Iraq. collected: 1972.
 locality: 1 km northeast of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.

PI 538415 to 538522-continued

- PI 538462 donor id: G2562. origin: Iraq. collected: 1972. locality: 1 km northeast of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538463 donor id: G2563. origin: Iraq. collected: 1972.
 locality: 1 km northeast of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.
- PI 538464 donor id: G2565. origin: Iraq. collected: 1972.
 locality: 1 km northeast of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.
- PI 538465 donor id: G2566. origin: Iraq. collected: 1972.
 locality: 1 km northeast of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.
- PI 538466 donor id: G2568. origin: Iraq. collected: 1972.
 locality: 1 km northeast of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.
- PI 538467 donor id: G2569. origin: Iraq. collected: 1972. locality: 1 km northeast of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538468 donor id: G2570. origin: Iraq. collected: 1972. locality: 1 km northeast of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538469 donor id: G2571. origin: Iraq. collected: 1972. locality: 1 km northeast of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538470 donor id: G2573. origin: Iraq. collected: 1972. locality: 1 km northeast of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538471 donor id: G2577. origin: Iraq. collected: 1972. locality: 1 km northeast of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538472 donor id: G2612. origin: Iraq. collected: 1972.
 locality: 2 km northwest of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.
- PI 538473 donor id: G2614. origin: Iraq. collected: 1972. locality: 2 km northwest of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538474 donor id: G2616. origin: Iraq. collected: 1972.
 locality: 2 km northwest of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.

- PI 538475 donor id: G2618. origin: Iraq. collected: 1972. locality: 2 km northwest of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538476 donor id: G2627. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538477 donor id: G2629. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538478 donor id: G2633. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538479 donor id: G2635. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538480 donor id: G2636. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538481 donor id: G2640. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538482 donor id: G2641. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538483 donor id: G2644. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538484 donor id: G2645. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538485 donor id: G2647. origin: Iraq. collected: 1972.
 locality: 4 km northeast of Shaqlawa. elevation: 1000m.
 Annual. Wild. Seed.
- PI 538486 donor id: G2648. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538487 donor id: G2659. origin: Iraq. collected: 1972. locality: 7 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.

- PI 538488 donor id: G2661. origin: Iraq. collected: 1972. locality: 7 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538489 donor id: G2673. origin: Iraq. collected: 1972. locality: 21 km south of Harir. elevation: 1000m. Annual. Wild. Seed.
- PI 538490 donor id: G2674. origin: Iraq. collected: 1972. locality: 21 km south of Harir. elevation: 1000m. Annual. Wild. Seed.
- PI 538491 donor id: G2675. origin: Iraq. collected: 1972. locality: 21 km south of Harir. elevation: 1000m. Annual. Wild. Seed.
- PI 538492 donor id: G2676. origin: Iraq. collected: 1972. locality: 21 km south of Harir. elevation: 1000m. Annual. Wild. Seed.
- PI 538493 donor id: G2717. origin: Iraq. collected: 1972. locality: 5.5 km north of Dohuk. elevation: 750m. Annual. Wild. Seed.
- PI 538494 donor id: G2736. origin: Iraq. collected: 1972. locality: 24 km northeast of Dohuk towards Amadiya. elevation: 950m. Annual. Wild. Seed.
- PI 538495 donor id: G2771. origin: Iraq. collected: 1972. locality: east of Suara Tuka; ca. 3-4 km west of Mazorka. elevation: 1150m. Annual. Wild. Seed.
- PI 538496 donor id: G2786. origin: Iraq. collected: 1972. locality: between Zawita and Suara Tuka. Annual. Wild. Seed.
- PI 538497 donor id: G2788. origin: Iraq. collected: 1972. locality: between Zawita and Suara Tuka. Annual. Wild. Seed.
- PI 538498 donor id: G2789. origin: Iraq. collected: 1972. locality: between Zawita and Suara Tuka. Annual. Wild. Seed.
- PI 538499 donor id: G2795. origin: Iraq. collected: 1972. locality: between Zawita and Suara Tuka. Annual. Wild. Seed.
- PI 538500 donor id: G2797. origin: Iraq. collected: 1972. locality: between Zawita and Suara Tuka. Annual. Wild. Seed.

PI 538415 to 538522-continued

- PI 538501 donor id: G2799. origin: Iraq. collected: 1972. locality: between Zawita and Suara Tuka. Annual. Wild. Seed.
- PI 538502 donor id: G2807. origin: Iraq. collected: 1972. locality: between Zawita and Suara Tuka. Annual. Wild. Seed.
- PI 538503 donor id: G2810. origin: Iraq. collected: 1972. locality: between Zawita and Suara Tuka. Annual. Wild. Seed.
- PI 538504 donor id: G2816. origin: Iraq. collected: 1972. locality: 41 km northwest of Sulaimaniya towards Surdash. elevation: 780m. Annual. Wild. Seed.
- PI 538505 donor id: G2818. origin: Iraq. collected: 1972. locality: 41 km northwest of Sulaimaniya towards Surdash. elevation: 780m. Annual. Wild. Seed.
- PI 538506 donor id: G2820. origin: Iraq. collected: 1972. locality: 43 km northwest of Sulaimaniya near Surdash. elevation: 800m. Annual. Wild. Seed.
- PI 538507 donor id: G2822. origin: Iraq. collected: 1972. locality: 43 km northwest of Sulaimaniya near Surdash. elevation: 800m. Annual. Wild. Seed.
- PI 538508 donor id: G2823. origin: Iraq. collected: 1972. locality: 43 km northwest of Sulaimaniya near Surdash. elevation: 800m. Annual. Wild. Seed.
- PI 538509 donor id: G2829. origin: Iraq. collected: 1972. locality: 16 km east of Sulaimaniya towards Chuarta. elevation: 1300m. Annual. Wild. Seed.
- PI 538510 donor id: G2830. origin: Iraq. collected: 1972. locality: 19 km east of Sulaimaniya towards Chuarta. elevation: 1050m. Annual. Wild. Seed.
- PI 538511 donor id: G2831. origin: Iraq. collected: 1972. locality: 19 km east of Sulaimaniya towards Chuarta. elevation: 1050m. Annual. Wild. Seed.
- PI 538512 donor id: G2832. origin: Iraq. collected: 1972. locality: 19 km east of Sulaimaniya towards Chuarta. elevation: 1050m. Annual. Wild. Seed.
- PI 538513 donor id: G2838. origin: Iraq. collected: 1972. locality: 14 km south of Sulaimaniya towards Qara Dagh. elevation: 850m. Annual. Wild. Seed.

PI 538415 to 538522-continued

- PI 538514 donor id: G2839. origin: Iraq. collected: 1972. locality: 14 km south of Sulaimaniya towards Qara Dagh. elevation: 850m. Annual. Wild. Seed.
- PI 538515 donor id: G2854. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538516 donor id: G2855. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538517 donor id: G2856. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538518 donor id: G2861. origin: Iraq. collected: 1972. locality: east of Suara Tuka; ca. 3-4 km west of Mazorka Gorge. elevation: 1150m. Annual. Wild. Seed.
- PI 538519 donor id: G2889. origin: Iraq. collected: 1972. locality: between Zawita and Suara Tuka. Annual. Wild. Seed.
- PI 538520 donor id: G2890. origin: Iraq. collected: 1972. locality: 41 km northwest of Sulaimaniya towards Surdash. elevation: 780m. Annual. Wild. Seed.
- PI 538521 donor id: G2891. origin: Iraq. collected: 1972. locality: 43 km northwest of Sulaimaniya near Surdash. elevation: 800m. Annual. Wild. Seed.
- PI 538522 donor id: G3217. origin: Iraq. collected: 1972.
 locality: 1 km northeast of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.

PI 538523. Avena sativa L. POACEAE Common oat

Donated by: Sorrells, M., Cornell University, Dept. of Plant Breeding, Ithaca, New York, United States. Received January 28, 1991.

origin: United States. origin institute: Cornell University, Dept. of Plant Breeding, Ithaca, New York 14850. cultivar: N.Y. OAT COMPOSITE I-VR. pedigree: Selection from N.Y. Oat Composite 1. other id: GP-9. source: Crop Sci. 18(3):530 1978. group: CSR-OAT. remarks: Source of BYDV and crown rust tolerant lines for use either as parents or as released varieties. Spring Annual. Breeding Material. Seed.

- PI 538524 to 538625. Triticum boeoticum Boiss. POACEAE Wild einkorn
 - Donated by: Waines, J.G., Dept. of Botany & Plant Sciences, Univ. of California, Riverside, California, United States. Received January 26, 1990.
 - PI 538524 donor id: Gl169. origin: Turkey. collected: 1965. locality: 29 km south of Malatya. elevation: 1030m. Annual. Wild. Seed.
 - PI 538525 donor id: G1780. origin: Turkey. collected: 1972. locality: 41.1 km west of Kiziltepe. elevation: 600m. Annual. Wild. Seed.
 - PI 538526 donor id: G1840. origin: Turkey. collected: 1972. locality: 53.8 km west of Kiziltepe. elevation: 625m. Annual. Wild. Seed.
 - PI 538527 donor id: Gl858. origin: Turkey. collected: 1972. locality: 80.5 km west of Kiziltepe. elevation: 670m. Annual. Wild. Seed.
 - PI 538528 donor id: Gl874. origin: Turkey. collected: 1972. locality: 83.8 km west of Kiziltepe. elevation: 670m. Annual. Wild. Seed.
 - PI 538529 donor id: G1891. origin: Turkey. collected: 1972. locality: 78.9 km west of Kiziltepe. elevation: 720m. Annual. Wild. Seed.
 - PI 538530 donor id: G1930. origin: Turkey. collected: 1972. locality: 2.9 km south of Viransehir. elevation: 600m. Annual. Wild. Seed.
 - PI 538531 donor id: G1931. origin: Turkey. collected: 1972. locality: 2.9 km south of Viransehir. elevation: 600m. Annual. Wild. Seed.
 - PI 538532 donor id: G1933. origin: Turkey. collected: 1972. locality: 2.9 km south of Viransehir. elevation: 600m. Annual. Wild. Seed.
 - PI 538533 donor id: G1980. origin: Turkey. collected: 1972. locality: 38.2 km east of Urfa. elevation: 800m. Annual. Wild. Seed.
 - PI 538534 donor id: G1990. origin: Turkey. collected: 1972. locality: 52.5 km east of Urfa, near Hilvan. elevation: 650m. Annual. Wild. Seed.
 - PI 538535 donor id: G1993. origin: Turkey. collected: 1972. locality: 52.5 km east of Urfa, near Hilvan. elevation: 650m. Annual. Wild. Seed.

PI 538524 to 538625-continued

- PI 538536 donor id: G1994. origin: Turkey. collected: 1910. locality: 52.5 km east of Urfa, near Hilvan. elevation: 650m. Annual. Wild. Seed.
- PI 538537 donor id: G2000. origin: Turkey. collected: 1972. locality: 52.5 km east of Urfa, near Hilvan. elevation: 650m. Annual. Wild. Seed.
- PI 538538 donor id: G2002. origin: Turkey. collected: 1972. locality: 52.5 km east of Urfa, near Hilvan. elevation: 650m. Annual. Wild. Seed.
- PI 538539 donor id: G2154. origin: Turkey. collected: 1972. locality: 52.5 km west of Diyarbakir in the Karacadag. elevation: 1400m. Annual. Wild. Seed.
- PI 538540 donor id: G2155. origin: Turkey. collected: 1972. locality: 52.5 km west of Diyarbakir in the Karacadag. elevation: 1400m. Annual. Wild. Seed.
- PI 538541 donor id: G2176. origin: Turkey. collected: 1972. locality: 20.2 km east of Siverek. elevation: 1200m. Annual. Wild. Seed.
- PI 538542 donor id: G2226. origin: Iraq. collected: 1972. locality: 1 km northeast of Salahaden. elevation: 1100m. Annual. Wild. Seed.
- PI 538543 donor id: G2232. origin: Iraq. collected: 1972. locality: 1 km northeast of Salahaden. elevation: 1100m. Annual. Wild. Seed.
- PI 538544 donor id: G2236. origin: Iraq. collected: 1972. locality: 1 km northeast of Salahaden. elevation: 1100m. Annual. Wild. Seed.
- PI 538545 donor id: G2257. origin: Iraq. collected: 1972. locality: 2 km northwest of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538546 donor id: G2258. origin: Iraq. collected: 1972. locality: 2 km northwest of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538547 donor id: G2290. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538548 donor id: G2292. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.

- PI 538549 donor id: G2308. origin: Iraq. collected: 1972. locality: 7 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538550 donor id: G2310. origin: Iraq. collected: 1972. locality: 7 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538551 donor id: G2324. origin: Iraq. collected: 1972. locality: 21 km south of Harir. elevation: 1000m. Annual. Wild. Seed.
- PI 538552 donor id: G2339. origin: Iraq. collected: 1972. locality: 13 km west of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538553 donor id: G2340. origin: Iraq. collected: 1972. locality: 13 km west of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538554 donor id: G2351. origin: Iraq. collected: 1972. locality: 13 km west of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538555 donor id: G2365. origin: Iraq. collected: 1972. locality: 5.5 km north of Dohuk. elevation: 750m. Annual. Wild. Seed.
- PI 538556 donor id: G2377. origin: Iraq. collected: 1972. locality: 5.5 km north of Dohuk. elevation: 750m. Annual. Wild. Seed.
- PI 538557 donor id: G2378. origin: Iraq. collected: 1972. locality: 5.5 km north of Dohuk. elevation: 750m. Annual. Wild. Seed.
- PI 538558 donor id: G2379. origin: Iraq. collected: 1972. locality: 5.5 km north of Dohuk. elevation: 750m. Annual. Wild. Seed.
- PI 538559 donor id: G2385. origin: Iraq. collected: 1972. locality: 24 km northeast of Dohuk towards Amadiya. elevation: 950m. Annual. Wild. Seed.
- PI 538560 donor id: G2395. origin: Iraq. collected: 1972. locality: 24 km northeast of Dohuk towards Amadiya. elevation: 950m. Annual. Wild. Seed.
- PI 538561 donor id: G2399. origin: Iraq. collected: 1972. locality: 2 km west of Suara Tuka. elevation: 1250m. Annual. Wild. Seed.

PI 538524 to 538625-continued

- PI 538562 donor id: G2404. origin: Iraq. collected: 1972. locality: 2 km west of Suara Tuka. elevation: 1250m. Annual. Wild. Seed.
- PI 538563 donor id: G2405. origin: Iraq. collected: 1972. locality: 2 km west of Suara Tuka. elevation: 1250m. Annual. Wild. Seed.
- PI 538564 donor id: G2410. origin: Iraq. collected: 1972. locality: 6 km east of Suara Tuka. elevation: 1050m. Annual. Wild. Seed.
- PI 538565 donor id: G2412. origin: Iraq. collected: 1972. locality: 6 km east of Suara Tuka. elevation: 1050m. Annual. Wild. Seed.
- PI 538566 donor id: G2415. origin: Iraq. collected: 1972. locality: 6 km east of Suara Tuka. elevation: 1050m. Annual. Wild. Seed.
- PI 538567 donor id: G2417. origin: Iraq. collected: 1972. locality: 6 km east of Suara Tuka. elevation: 1050m. Annual. Wild. Seed.
- PI 538568 donor id: G2433. origin: Iraq. collected: 1972. locality: east of Suara Tuka; 3-4 km west of Mazorka Gorge. elevation: 1150m. Annual. Wild. Seed.
- PI 538569 donor id: G2434. origin: Iraq. collected: 1972. locality: east of Suara Tuka; 3-4 km west of Mazorka Gorge. elevation: 1150m. Annual. Wild. Seed.
- PI 538570 donor id: G2442. origin: Iraq. collected: 1972. locality: between Zawita and Suara Tuka. Annual. Wild. Seed.
- PI 538571 donor id: G2448. origin: Iraq. collected: 1972. locality: between Zawita and Suara Tuka. Annual. Wild. Seed.
- PI 538572 donor id: G2457. origin: Iraq. collected: 1972. locality: between Zawita and Suara Tuka. Annual. Wild. Seed.
- PI 538573 donor id: G2461. origin: Iraq. collected: 1972. locality: between Zawita and Suara Tuka. Annual. Wild. Seed.
- PI 538574 donor id: G2487. origin: Iraq. collected: 1972. locality: ca. 25 km northwest of Sulaimaniya on road to Dokhar. elevation: 800m. Annual. Wild. Seed.

- PI 538575 donor id: G2488. origin: Iraq. collected: 1972.
 locality: ca. 25 km northwest of Sulaimaniya on road to
 Dokhar. elevation: 800m. Annual. Wild. Seed.
- PI 538576 donor id: G2514. origin: Iran. collected: 1972. locality: 5.5 km north of Bisotun. elevation: 1350m. Annual. Wild. Seed.
- PI 538577 donor id: G2515. origin: Iran. collected: 1972. locality: 5.5 km north of Bisotun. elevation: 1350m. Annual. Wild. Seed.
- PI 538578 donor id: G2539. origin: Iran. collected: 1972.
 locality: 47 km northwest of Shahabad. elevation: 1500m.
 Annual. Wild. Seed.
- PI 538579 donor id: G2588. origin: Iraq. collected: 1972. locality: 1 km northeast of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538580 donor id: G2590. origin: Iraq. collected: 1972.
 locality: 1 km northeast of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.
- PI 538581 donor id: G2595. origin: Iraq. collected: 1972.
 locality: 1 km northeast of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.
- PI 538582 donor id: G2600. origin: Iraq. collected: 1972.
 locality: 1 km northeast of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.
- PI 538583 donor id: G2623. origin: Iraq. collected: 1972.
 locality: 2 km northwest of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.
- PI 538584 donor id: G2653. origin: Iraq. collected: 1972. locality: 4 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538585 donor id: G2668. origin: Iraq. collected: 1972. locality: 7 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538586 donor id: G2681. origin: Iraq. collected: 1972. locality: 21 km south of Harir. elevation: 1000m. Annual. Wild. Seed.
- PI 538587 donor id: G2690. origin: Iraq. collected: 1972. locality: 21 km south of Harir. elevation: 1000m. Annual. Wild. Seed.

- PI 538588 donor id: G2693. origin: Iraq. collected: 1972. locality: 13 km west of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538589 donor id: G2695. origin: Iraq. collected: 1972. locality: 13 km west of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538590 donor id: G2700. origin: Iraq. collected: 1972. locality: 13 km west of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538591 donor id: G2701. origin: Iraq. collected: 1972. locality: 13 km west of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538592 donor id: G2702. origin: Iraq. collected: 1972. locality: 13 km west of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538593 donor id: G2704. origin: Iraq. collected: 1972. locality: 13 km west of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538594 donor id: G2705. origin: Iraq. collected: 1972. locality: 13 km west of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538595 donor id: G2708. origin: Iraq. collected: 1972. locality: 13 km west of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538596 donor id: G2709. origin: Iraq. collected: 1972. locality: 13 km west of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538597 donor id: G2712. origin: Iraq. collected: 1972. locality: 13 km west of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538598 donor id: G2719. origin: Iraq. collected: 1972. locality: 5.5 km north of Dohuk. elevation: 750m. Annual. Wild. Seed.
- PI 538599 donor id: G2737. origin: Iraq. collected: 1972. locality: 24 km northeast of Dohuk towards Amadiya. elevation: 950m. Annual. Wild. Seed.
- PI 538600 donor id: G2760. origin: Iraq. collected: 1972. locality: 2 km west of Suara Tuka. elevation: 1250m. Annual. Wild. Seed.

- PI 538601 donor id: G2763. origin: Iraq. collected: 1972. locality: 6 km east of Suara Tuka. elevation: 1050m. Annual. Wild. Seed.
- PI 538602 donor id: G2764. origin: Iraq. collected: 1972. locality: 6 km east of Suara Tuka. elevation: 1050m. Annual. Wild. Seed.
- PI 538603 donor id: G2765. origin: Iraq. collected: 1972. locality: 6 km east of Suara Tuka. elevation: 1050m. Annual. Wild. Seed.
- PI 538604 donor id: G2767. origin: Iraq. collected: 1972. locality: 6 km east of Suara Tuka. elevation: 1050m. Annual. Wild. Seed.
- PI 538605 donor id: G2825. origin: Iraq. collected: 1972. locality: 43 km northwest of Sulaimaniya near Surdash. elevation: 800m. Annual. Wild. Seed.
- PI 538606 donor id: G2836. origin: Iraq. collected: 1972. locality: 12 km south of Sulaimaniya. Annual. Wild. Seed.
- PI 538607 donor id: G2842. origin: Turkey. collected: 1972. locality: 2.9 km south of Viransehir. elevation: 600m. Annual. Wild. Seed.
- PI 538608 donor id: G2843. origin: Turkey. collected: 1972. locality: 62 km east Urfa, east of Hilvan. Annual. Wild. Seed.
- PI 538609 donor id: G2845. origin: Iraq. collected: 1972.
 locality: 1 km northeast of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.
- PI 538610 donor id: G2847. origin: Iraq. collected: 1972.
 locality: 1 km northeast of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.
- PI 538611 donor id: G2848. origin: Iraq. collected: 1972.
 locality: 1 km northeast of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.
- PI 538612 donor id: G2851. origin: Iraq. collected: 1972.
 locality: 2 km northwest of Salahadin. elevation: 1100m.
 Annual. Wild. Seed.
- PI 538613 donor id: G2860. origin: Iraq. collected: 1972. locality: 2 km west of Suara Tuka. elevation: 1250m. Annual. Wild. Seed.

PI 538524 to 538625-continued

- PI 538614 donor id: G2864. origin: Iraq. collected: 1972. locality: 1 km northeast of Salahadin. elevation: 1100m. Annual. Wild. Seed.
- PI 538615 donor id: G2866. origin: Iraq. collected: 1972. locality: 7 km northeast of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538616 donor id: G2880. origin: Iraq. collected: 1972. locality: 13 km west of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538617 donor id: G2881. origin: Iraq. collected: 1972. locality: 13 km west of Shaqlawa. elevation: 1000m. Annual. Wild. Seed.
- PI 538618 donor id: G2888. origin: Iraq. collected: 1972. locality: 6 km east of Suara Tuka. elevation: 1050m. Annual. Wild. Seed.
- PI 538619 donor id: G2928. origin: Turkey. locality: Yozqat; 48 km southeast of Sorgun. elevation: 1100m. Annual. Wild. Seed.
- PI 538620 donor id: G2937. origin: Turkey. locality: Urfa/Birecik, 5 km east. Annual. Wild. Seed.
- PI 538621 donor id: G2942. origin: Turkey. locality: Mardin; 13 km southwest of Idil. elevation: 770m. Annual. Wild. Seed.
- PI 538622 donor id: G2945. origin: Turkey. locality: Mardin; 15 km southwest of Surgucu. elevation: 900m. Annual. Wild. Seed.
- PI 538623 donor id: G2951. origin: Turkey. locality: Bolu; 10 km east Mengen. elevation: 700m. Annual. Wild. Seed.
- PI 538624 donor id: G2957. origin: Turkey. locality: Burdur; Tefenni. (I.D. No. TR 035461). elevation: 1260m. Annual. Wild. Seed.
- PI 538625 donor id: G2958. origin: Turkey. locality: Denizli; Acipayam? (I.D.No. TR 035465). elevation: 1160m. Annual. Wild. Seed.

- PI 538626 to 538719. Triticum dicoccoides (Korn. ex Aschers. & Graebn.)
 Aarons. POACEAE Wild emmer
 - **Donated by:** Waines, J.G., Dept. of Botany & Plant Sciences, Univ. of California, Riverside, California, United States. Received February 26, 1990.
 - PI 538626 donor id: G2038. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
 - PI 538627 donor id: G2039. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
 - PI 538628 donor id: G2042. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
 - PI 538629 donor id: G2044. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
 - PI 538630 donor id: G2045. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
 - PI 538631 donor id: G2048. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
 - PI 538632 donor id: G2054. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
 - PI 538633 donor id: G2056. origin: Turkey. collected: 1972. locality: 32.6 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
 - PI 538634 donor id: G2057. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
 - PI 538635 donor id: G2064. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
 - PI 538636 donor id: G2065. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
 - PI 538637 donor id: G2069. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.

- PI 538638 donor id: G2074. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
- PI 538639 donor id: G2077. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
- PI 538640 donor id: G2080. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
- PI 538641 donor id: G2081. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
- PI 538642 donor id: G2082. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
- PI 538643 donor id: G2088. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
- PI 538644 donor id: G2091. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
- PI 538645 donor id: G2094. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
- PI 538646 donor id: G2095. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
- PI 538647 donor id: G2096. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
- PI 538648 donor id: G2097. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
- PI 538649 donor id: G2102. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.
- PI 538650 donor id: G2105. origin: Turkey. collected: 1972. locality: 36.2 km west of Diyarbakir in the Karacadag. elevation: 1200m. Annual. Wild. Seed.

- PI 538651 donor id: G2110. origin: Turkey. collected: 1972. locality: 44 km west of Diyarbakir in the Karacadag. elevation: 1400m. Annual. Wild. Seed.
- PI 538652 donor id: G2112. origin: Turkey. collected: 1972. locality: 44 km west of Diyarbakir in the Karacadag. elevation: 1400m. Annual. Wild. Seed.
- PI 538653 donor id: G2114. origin: Turkey. collected: 1972. locality: 44 km west of Diyarbakir in the Karacadag. elevation: 1400m. Annual. Wild. Seed.
- PI 538654 donor id: G2115. origin: Turkey. collected: 1972. locality: 44 km west of Diyarbakir in the Karacadag. elevation: 1400m. Annual. Wild. Seed.
- PI 538655 donor id: G2120. origin: Turkey. collected: 1972. locality: 44 km west of Diyarbakir in the Karacadag. elevation: 1400m. Annual. Wild. Seed.
- PI 538656 donor id: G2123. origin: Turkey. collected: 1972. locality: 52.6 km west of Diyarbakir in the Karacadag. elevation: 1560m. Annual. Wild. Seed.
- PI 538657 donor id: G2124. origin: Turkey. collected: 1972. locality: 51 km west of Diyarbakir in the Karacadag. elevation: 1400m. Annual. Wild. Seed.
- PI 538658 donor id: G2127. origin: Turkey. collected: 1972. locality: 51 km west of Diyarbakir in the Karacadag. elevation: 1400m. Annual. Wild. Seed.
- PI 538659 donor id: G2134. origin: Turkey. collected: 1972. locality: 52.5 km west of Diyarbakir in the Karacadag. elevation: 1400m. Annual. Wild. Seed.
- PI 538660 donor id: G2135. origin: Turkey. collected: 1972. locality: 52.5 km west of Diyarbakir in the Karacadag. elevation: 1400m. Annual. Wild. Seed.
- PI 538661 donor id: G2136. origin: Turkey. collected: 1972. locality: 52.5 km west of Diyarbakir in the Karacadag. elevation: 1400m. Annual. Wild. Seed.
- PI 538662 donor id: G2139. origin: Turkey. collected: 1972. locality: 33.6 km west of Diyarbakir in the Karacadag. Annual. Wild. Seed.
- PI 538663 donor id: G2140. origin: Turkey. collected: 1972. locality: 33.6 km west of Diyarbakir in the Karacadag. Annual. Wild. Seed.

- PI 538664 donor id: G2145. origin: Turkey. collected: 1972. locality: 33.6 km west of Diyarbakir in the Karacadag. Annual. Wild. Seed.
- PI 538665 donor id: G2165. origin: Turkey. collected: 1972. locality: 52.5 km west of Diyarbakir in the Karacadag. elevation: 1400m. Annual. Wild. Seed.
- PI 538666 donor id: G2167. origin: Turkey. collected: 1972. locality: 52.5 km west of Diyarbakir in the Karacadag. elevation: 1400m. Annual. Wild. Seed.
- PI 538667 donor id: G2179. origin: Turkey. collected: 1972. locality: 20.2 km east of Siverek. elevation: 1200m. Annual. Wild. Seed.
- PI 538668 donor id: G2184. origin: Turkey. collected: 1972. locality: 20.2 km east of Siverek. elevation: 1200m. Annual. Wild. Seed.
- PI 538669 donor id: G2996. origin: Israel. collected: 1973. locality: Afula-Tiberias. elevation: 300m. Annual. Wild. Seed.
- PI 538670 donor id: G2997. origin: Israel. collected: 1973. locality: Afula-Tiberias. elevation: 300m. Annual. Wild. Seed.
- PI 538671 donor id: G2998. origin: Israel. collected: 1973. locality: Afula-Tiberias. elevation: 300m. Annual. Wild. Seed.
- PI 538672 donor id: G2999. origin: Israel. collected: 1973. locality: Afula-Tiberias. elevation: 300m. Annual. Wild. Seed.
- PI 538673 donor id: G3000. origin: Israel. collected: 1973. locality: Afula-Tiberias. elevation: 300m. Annual. Wild. Seed.
- PI 538674 donor id: G3001. origin: Israel. collected: 1973. locality: Afula-Tiberias. elevation: 300m. Annual. Wild. Seed.
- PI 538675 donor id: G3002. origin: Israel. collected: 1973. locality: Afula-Tiberias. elevation: 300m. Annual. Wild. Seed.
- PI 538676 donor id: G3003. origin: Israel. collected: 1973. locality: Afula-Tiberias. elevation: 300m. Annual. Wild. Seed.

- PI 538677 donor id: G3004. origin: Israel. collected: 1973. locality: Afula-Tiberias. elevation: 300m. Annual. Wild. Seed.
- PI 538678 donor id: G3006. origin: Israel. collected: 1973. locality: Afula-Tiberias. elevation: 300m. Annual. Wild. Seed.
- PI 538679 donor id: G3007. origin: Israel. collected: 1973. locality: Afula-Tiberias. elevation: 300m. Annual. Wild. Seed.
- PI 538680 donor id: G3012. origin: Israel. collected: 1973. locality: Korazin, 1 km east of junction to Almagor. Annual. Wild. Seed.
- PI 538681 donor id: G3013. origin: Israel. collected: 1973. locality: Korazin, 1 km east of junction to Almagor. Annual. Wild. Seed.
- PI 538682 donor id: G3014. origin: Israel. collected: 1973. locality: Korazin, 1 km east of junction to Almagor. Annual. Wild. Seed.
- PI 538683 donor id: G3016. origin: Israel. collected: 1973. locality: Korazin, 1 km east of junction to Almagor. Annual. Wild. Seed.
- PI 538684 donor id: G3017. origin: Israel. collected: 1973. locality: ca. 3 km south of Rosh Pinna. Annual. Wild. Seed.
- PI 538685 donor id: G3027. origin: Israel. collected: 1973. locality: Rosh Pinna, 1-2 km south towards Safad. Annual. Wild. Seed.
- PI 538686 donor id: G3035. origin: Israel. collected: 1973. locality: Rosh Pinna, 1-2 km south towards Safad. Annual. Wild. Seed.
- PI 538687 donor id: G3037. origin: Israel. collected: 1973. locality: Rosh Pinna, 1-2 km south towards Safad. Annual. Wild. Seed.
- PI 538688 donor id: G3038. origin: Israel. collected: 1973. locality: Rosh Pinna, 1-2 km south towards Safad. Annual. Wild. Seed.
- PI 538689 donor id: G3042. origin: Israel. collected: 1973. locality: Rosh Pinna, 1-2 km south towards Safad. Annual. Wild. Seed.

- PI 538690 donor id: G3050. origin: Israel. collected: 1973. locality: near Safad on road to Rosh Pinna. elevation: 800m. Annual. Wild. Seed.
- PI 538691 donor id: G3051. origin: Israel. collected: 1973. locality: near Safad on road to Rosh Pinna. elevation: 800m. Annual. Wild. Seed.
- PI 538692 donor id: G3052. origin: Israel. collected: 1973. locality: near Safad on road to Rosh Pinna. elevation: 800m. Annual. Wild. Seed.
- PI 538693 donor id: G3053. origin: Israel. collected: 1973. locality: near Safad on road to Rosh Pinna. elevation: 800m. Annual. Wild. Seed.
- PI 538694 donor id: G3054. origin: Israel. collected: 1973. locality: near Safad on road to Rosh Pinna. elevation: 800m. Annual. Wild. Seed.
- PI 538695 donor id: G3063. origin: Israel. collected: 1973. locality: between Ein Hashofet and Daliya. Annual. Wild. Seed.
- PI 538696 donor id: G3064. origin: Israel. collected: 1973. locality: between Ein Hashofet and Daliya. Annual. Wild. Seed.
- PI 538697 donor id: G3065. origin: Israel. collected: 1973. locality: between Ein Hashofet and Daliya. Annual. Wild. Seed.
- PI 538698 donor id: G3066. origin: Israel. collected: 1973. locality: between Ein Hashofet and Daliya. Annual. Wild. Seed.
- PI 538699 donor id: G3067. origin: Israel. collected: 1973. locality: between Ramla and Jericho, ca. 6 km east of Taibe. Annual. Wild. Seed.
- PI 538700 donor id: G3073. origin: Lebanon. collected: 1973. locality: near Rashaya. elevation: 1000m. Annual. Wild. Seed.
- PI 538701 donor id: G3075. origin: Lebanon. collected: 1973. locality: near Rashaya. elevation: 1000m. Annual. Wild. Seed.
- PI 538702 donor id: G3078. origin: Lebanon. collected: 1973. locality: near Rashaya. elevation: 1000m. Annual. Wild. Seed.

- PI 538703 donor id: G3079. origin: Lebanon. collected: 1973. locality: near Rashaya. elevation: 1000m. Annual. Wild. Seed.
- PI 538704 donor id: G3080. origin: Lebanon. collected: 1973. locality: near Rashaya. elevation: 1000m. Annual. Wild. Seed.
- PI 538705 donor id: G3082. origin: Lebanon. collected: 1973. locality: between Aiha and Kfarkouk, ca. 1 km from Aiha. Annual. Wild. Seed.
- PI 538706 donor id: G3083. origin: Lebanon. collected: 1973. locality: between Aiha and Kfarkouk, ca. 1 km from Aiha. Annual. Wild. Seed.
- PI 538707 donor id: G3085. origin: Lebanon. collected: 1973. locality: between Aiha and Kfarkouk, ca. 1 km from Aiha. Annual. Wild. Seed.
- PI 538708 donor id: G3087. origin: Lebanon. collected: 1973. locality: between Aiha and Kfarkouk, about 1 km from Aiha. Annual. Wild. Seed.
- PI 538709 donor id: G3089. origin: Lebanon. collected: 1973. locality: between Aiha and Kfarkouk. Annual. Wild. Seed.
- PI 538710 donor id: G3092. origin: Lebanon. collected: 1973. locality: Aiha-Kfarkouk, above 'sahlet'. Annual. Wild. Seed.
- PI 538711 donor id: G3094. origin: Lebanon. collected: 1973. locality: Aiha-Kfarkouk, above 'sahlet'. Annual. Wild. Seed.
- PI 538712 donor id: G3101. origin: Lebanon. collected: 1973. locality: Aiha-Kfarkouk, above 'sahlet'. Annual. Wild. Seed.
- PI 538713 donor id: G3110. origin: Lebanon. collected: 1973. locality: between Ain Harsch and Ain Ata. Annual. Wild. Seed.
- PI 538714 donor id: G3111. origin: Lebanon. collected: 1973. locality: between Ain Harsch and Ain Ata. Annual. Wild. Seed.
- PI 538715 donor id: G3113. origin: Lebanon. collected: 1973. locality: between Ain Harsch and Ain Ata. Annual. Wild. Seed.

- PI 538716 donor id: G3130. origin: Lebanon. collected: 1973. locality: between Rashaya and Aiha. elevation: 1000m. Annual. Wild. Seed.
- PI 538717 donor id: G3131. origin: Lebanon. collected: 1973. locality: between Rashaya and Aiha. elevation: 1000m. Annual. Wild. Seed.
- PI 538718 donor id: G3133. origin: Lebanon. collected: 1973. locality: between Rashaya and Aiha. elevation: 1000m. Annual. Wild. Seed.
- PI 538719 donor id: G3211. origin: Israel. collected: 1973. locality: 10 km northwest of Majdal Shams. Annual. Wild. Seed.
- PI 538720 to 538723. Triticum monococcum L. POACEAE Einkorn
 - Donated by: Waines, J.G., Dept. of Botany & Plant Sciences, Univ. of California, Riverside, California, United States. Received February 26, 1990.
 - PI 538720 donor id: G2899. origin: Turkey. locality: Cumaovasi, Izmir. Annual. Wild. Seed.
 - PI 538721 donor id: G2918. origin: Turkey. locality: Ecebat, Canakkale. Annual. Wild. Seed.
 - PI 538722 donor id: G2923. origin: Turkey. locality: Malkara, Tekirdag. Annual. Wild. Seed.
 - PI 538723 donor id: G2926. origin: Turkey. locality: Edirne. Annual. Wild. Seed.
- PI 538724 to 538751. Triticum urartu Thumanian ex Gandilyan POACEAE
 - **Donated by:** Waines, J.G., Dept. of Botany & Plant Sciences, Univ. of California, Riverside, California, United States. Received February 26, 1990.
 - PI 538724 donor id: G1805. origin: Turkey. collected: 1972. locality: 45.9 km west of Kiziltepe. elevation: 600m. Annual. Wild. Seed.
 - PI 538725 donor id: G1820. origin: Turkey. collected: 1972. locality: 53.8 km west of Kiziltepe. elevation: 625m. Annual. Wild. Seed.

- PI 538726 donor id: Gl837. origin: Turkey. collected: 1972. locality: 53.8 km west of Kiziltepe. elevation: 625m. Annual. Wild. Seed.
- PI 538727 donor id: G1920. origin: Turkey. collected: 1972. locality: 73.1 km east of Nusaybin. elevation: 925m. Annual. Wild. Seed.
- PI 538728 donor id: G1942. origin: Turkey. collected: 1972. locality: 5.4 km south of Viransehir. elevation: 600m. Annual. Wild. Seed.
- PI 538729 donor id: Gl946. origin: Turkey. collected: 1972. locality: 5.4 km south of Viransehir. elevation: 600m. Annual. Wild. Seed.
- PI 538730 donor id: G1950. origin: Turkey. collected: 1972. locality: 5.4 km south of Viransehir. elevation: 600m. Annual. Wild. Seed.
- PI 538731 donor id: G1957. origin: Turkey. collected: 1972. locality: 5.4 km south of Viransehir. elevation: 600m. Annual. Wild. Seed.
- PI 538732 donor id: G1959. origin: Turkey. collected: 1972. locality: 5.4 km south of Viransehir. elevation: 600m. Annual. Wild. Seed.
- PI 538733 donor id: G1960. origin: Turkey. collected: 1972. locality: 5.4 km south of Viransehir. elevation: 600m. Annual. Wild. Seed.
- PI 538734 donor id: G3137. origin: Lebanon. collected: 1973. locality: ca. 10 km west of Baal Bek. elevation: 1000m. Annual. Wild. Seed.
- PI 538735 donor id: G3138. origin: Lebanon. collected: 1973. locality: ca. 10 km west of Baal Bek. elevation: 1000m. Annual. Wild. Seed.
- PI 538736 donor id: G3139. origin: Lebanon. collected: 1973. locality: ca. 10 km west of Baal Bek. elevation: 1000m. Annual. Wild. Seed.
- PI 538737 donor id: G3146. origin: Lebanon. collected: 1973. locality: ca. 10 km west of Baal Bek. elevation: 1000m. Annual. Wild. Seed.
- PI 538738 donor id: G3147. origin: Lebanon. collected: 1973. locality: ca. 10 km west of Baal Bek. elevation: 1000m. Annual. Wild. Seed.

PI 538724 to 538751-continued

- PI 538739 donor id: G3149. origin: Lebanon. collected: 1973. locality: ca. 10 km west of Baal Bek. elevation: 1000m. Annual. Wild. Seed.
- PI 538740 donor id: G3171. origin: Lebanon. collected: 1973. locality: ca. 10 km west of Baal Bek. elevation: 1000m. Annual. Wild. Seed.
- PI 538741 donor id: G3175. origin: Lebanon. collected: 1973. locality: ca. 10 km west of Baal Bek. elevation: 1000m. Annual. Wild. Seed.
- PI 538742 donor id: G3180. origin: Lebanon. collected: 1973. locality: ca. 10 km west of Baal Bek. elevation: 1000m. Annual. Wild. Seed.
- PI 538743 donor id: G3186. origin: Lebanon. collected: 1973. locality: ca. 10 km west of Baal Bek. elevation: 1000m. Annual. Wild. Seed.
- PI 538744 donor id: G3198. origin: Lebanon. collected: 1973. locality: ca. 10 km west of Baal Bek. elevation: 1000m. Annual. Wild. Seed.
- PI 538745 donor id: G3203. origin: Lebanon. collected: 1973. locality: ca. 10 km west of Baal Bek. elevation: 1000m. Annual. Wild. Seed.
- PI 538746 donor id: G3243. origin: Lebanon. locality: Talia. elevation: 1030m. Annual. Wild. Seed.
- PI 538747 donor id: G3245. origin: Lebanon. locality: Talia. elevation: 1030m. Annual. Wild. Seed.
- PI 538748 donor id: G3257. origin: Lebanon. locality: Kfardane. elevation: 1080m. Annual. Wild. Seed.
- PI 538749 donor id: G3260. origin: Lebanon. locality: Iaat. elevation: 1050m. Annual. Wild. Seed.
- PI 538750 donor id: G3266. origin: Lebanon. locality: Iaat. elevation: 1050m. Annual. Wild. Seed.
- PI 538751 donor id: G3268. origin: Lebanon. locality: Iaat. elevation: 1050m. Annual. Wild. Seed.

PI 538752. Sorghum sp. POACEAE

Donated by: Osman, A., Dept. of Crop Production, Faculty of Agriculture, Sudan. Received February 17, 1976.

PI 538752-continued

donor id: R 422. origin: Sudan. cultivar: ABU 70.
Seed.

- PI 538753 to 538757. Vetiveria zizanioides (L.) Nash POACEAE Vetiver
 - Donated by: Gupta, R., National Bureau of Plant Genetic Resour., IARI Campus, New Delhi-110 012, India. Received January 03, 1990.
 - PI 538753 donor id: Hyb.-7. origin: India. pedigree: Selection no. 5 from Pl 39-1/P2. other id: BE 2668. remarks:

 Developed for essential oil production. Essential oil content 1.08%. Odor value slightly camphoraceous, peppery, woody-earthy, slightly aldehydic. Cultivated. Seed.
 - PI 538754 donor id: Hyb.-8. origin: India. pedigree: Selection no. 9 from Pl 39-1/P2 48-2. other id: BE 2668. remarks: Developed for essential oil production. Essential oil content 1.40%. Odor value dry, camphoraceous, peppery, sweet-woody, less earthy. Cultivated. Seed.
 - PI 538755 donor id: Hyb.-16. origin: India. pedigree: Selection no. 6 from Pl 55-1/P2 43. other id: BE 2668. remarks: Developed for essential oil production. Essential oil content 0.97%. Odor value woody, slightly earthy and camphoraceous, aldehydic. Cultivated. Seed.
 - PI 538756 donor id: Hyb.-26. origin: India. pedigree: Selection no. 14 from Pl 55-2/P2 35-5. other id: BE 2668. remarks: Developed for essential oil production. Essential oil content 1.20%. Odor value woody earthy, slightly balsamic, sweet spicy, dry, slightly camphoraceous, aldehydic. N\$. Cultivated. Seed.
 - PI 538757 origin: India. other id: BE 2668. locality: Local type, wild growing population at Faizabad, Uttar Pradesh. remarks: Essential oil content 0.5 to 0.7%. Wild. Seed.
- PI 538758 to 538759. Arachis hypogaea L. FABACEAE Peanut

Donated by: Inst. de Recherche pour les Huiles, et Oleagineux, Square Petrarque, 11, F-75016 Paris, France. Received September 05, 1989.

PI 538758 to 538759-continued

- PI 538758 origin: Burkina. cultivar: QH 243 C. pedigree: KH 184 A/424 A, F7. locality: Niangoloko Station. remarks: Spanish type. Erect pod with 2 seeds, gray, girdled and beaked. Seeds red, slightly elongated with flat surface. Hundred seed pod weight 70-80 grams. Hundred seed weight 40-50 grams. Shelled yield 68-70%. Oil content 50-51%. Seed weight per hectare 60-65kg. Resistant to rosette. Variety common in rainy zone of 800-900m where risk of rosette exists. Cultivar. Seed.
- PI 538759 origin: Burkina. cultivar: CN 94C. pedigree: Saria Cross 90/TY, F6. locality: Saria Station. remarks: Spanish type. Erect pod with 2 seeds, gray, slightly girdled with beak. Seeds light pink with slight flat surface. Hundred seed pod weight 75-85 grams. Hundred seed weight 38-40 grams. Shelled yield 60-70%. Oil content 50-51%. Seed weight per hectare. 60-65kg. Variety common in the center and the north of Burkina Faso. Cultivar. Seed.
- PI 538760. Hordeum vulgare L. POACEAE Barley

Donated by: Blake, T., Montana Agr. Exp. Sta., Montana State University, Dept. of Plant & Soil Sciences, Bozeman, Montana, United States. remarks: Wanubet Barley Germplasm. Received March 28, 1990.

origin: United States. origin institute: Montana Agr. Exp. Sta., Dept. of Plant & Soil Sciences, Montana State University, Bozeman, Montana 59717. cultivar: WANUBET. pedigree: Betzes (CI 6398) *7/Waxy Oderbrucker (CI 7563)/2/Nubet (CI 16559). other id: GP-129. source: Crop Sci. 30(6):1371 1990. group: CSR-BARLEY. remarks: Uniform for non-adherent lemma and palea and waxy endosperm. Plant height, heading date, and maturity date heterogeneous. Grain cream-colored. Spike mid-long and mid-lax with long rachilla hairs. Glumes hair-covered. Spring Annual. Breeding Material. Seed.

PI 538761. Hordeum vulgare L. POACEAE Barley

Donated by: Blake, T., Montana Agr. Exp. Sta., Montana State University, Dept. of Plant & Soil Sciences, Bozeman, Montana, United States. remarks: Shonkin Barley. Received March 28, 1990.

PI 538761-continued

origin: United States. origin institute: Montana Agr. Res. Sta., Dept. of Plant & Soil Sciences, Montana State University, Bozeman, Montana 59717. cultivar: SHONKIN. pedigree: Single selection from Wanubet germplasm. other id: CV-222. source: Crop Sci. 30(6):1355 1990. group: CSR-BARLEY. remarks: Two-rowed type. Kernel white, hulless, waxy. Maturity mid-season. Spikes mid-lax, mid-long, nod before maturity. Awns rough with long rachilla hairs. Endosperm waxy. Lemma and palea non-adherent. Spring Annual. Cultivar. Seed.

PI 538762. Pennisetum glaucum (L.) R. Br. POACEAE Pearl millet

Donated by: Alagarswamy, G., ICRISAT, Patancheru P.O., Andhra Pradesh, India. Received March 13, 1990.

origin: India. origin institute: ICRISAT, Cereals Program, Patancheru P.O., Andhra Pradesh 502 324. cultivar: ICML 89030. pedigree: Selection from landrace from Republic Chad -- IP 2696. remarks: Photoperiod insensitive over range of 10-17 h day length. Early flowering (40-45 days). Plant height 130cm. Leaves narrow. Stems thin. Panicles 8-10cm long, thin, compact. Seed grayish brown and 1000 seed mass 9g. Highly susceptible to downy mildew (Selerospora graminicola). Spring Annual. Breeding Material. Seed.

PI 538763. X Pseudoroetrigia sp. POACEAE

Donated by: Asay, K.H., Agricultural Research Service -- USDA, Forage and Range Research Lab., Utah State University, Logan, Utah, United States; and Soil Conservation Service -- USDA; and Utah Agr. Exp. Sta.. remarks: NewHy RS Hybrid. Received February 28, 1990.

origin: United States. origin institute: Agricultural Research Service -- USDA, Forage and Range Research Lab., Utah State University, Logan, Utah 84322-6300. cultivar: NEWHY. pedigree: Elytrigia repens/Pseudoroegneria spicata. other id: PVP 9000096. source: Pending. group: PVPO. other id: CV-18. group: CSR-WHEATGRASS. remarks: Advanced generation hybrid between quackgrass (Elyrigia repens) and bluebunch wheatgrass (Pseudoroegneria spicata). Has 2n=42 chromosomes and the SSSSHH genomes. Intermediate to the parents for most characteristics and is adapted to range sites receiving at least 33cm annual precipitation. Good salinity tolerance. Perennial. Cultivar. Seed.

PI 538764. Pisum sativum L. FABACEAE Pea

Donated by: Rogers Brothers Seed Co., United States. Received March 21, 1990.

origin: United States. cultivar: F801789-1. other id: PVP 9000097. source: Pending. group: PVPO. Cultivar. Seed.

PI 538765. Brassica oleracea var. botrytis L. BRASSICACEAE Cauliflower

Donated by: Nickerson-Zwaan b.v., United States. Received March 21, 1990.

origin: United States. cultivar: AUBADE. other id: PVP 9000098. source: Pending. group: PVPO. Cultivar. Seed.

PI 538766 to 538767. Brassica napus L. BRASSICACEAE Rape

Donated by: Svalof AB, United States. Received March 21, 1990.

PI 538766 origin: United States. cultivar: CELEBRA. other id: PVP 9000099. source: Pending. group: PVPO. Cultivar. Seed.

PI 538767 origin: United States. cultivar: VANGUARD. other id: PVP 9000100. source: Pending. group: PVPO. Cultivar. Seed.

PI 538768. Triticum aestivum L. POACEAE Wheat

Donated by: AgriPro Biosciences Inc., United States. Received March 21, 1990.

origin: United States. cultivar: BERGEN. other id: PVP 9000101. source: Pending. group: PVPO. remarks: Hard red type. Spring Annual. Cultivar. Seed.

PI 538769 to 538771. Phaseolus vulgaris L. var. vulgaris FABACEAE Garden bean

Donated by: Rogers Brothers Seed Co., United States. Received March 21, 1990.

PI 538769 origin: United States. cultivar: SUNRAE. other id: PVP 9000103. source: Pending. group: PVPO. Cultivar. Seed.

- PI 538769 to 538771-continued
 - PI 538770 origin: United States. cultivar: ROMANO 81350. other id: PVP 9000104. source: Pending. group: PVPO. Cultivar. Seed.
 - PI 538771 origin: United States. cultivar: BBL 110. other id: PVP 9000105. source: Pending. group: PVPO. Cultivar. Seed.
- PI 538772. Phaseolus vulgaris L. var. vulgaris FABACEAE Snap bean

 Donated by: Rogers Brothers Seed Co., United States. Received March
 21, 1990.

origin: United States. cultivar: CALGREEN. other id: PVP 9000106. source: Pending. group: PVPO. Cultivar. Seed.

PI 538773. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Tohoku National Agr. Exp. Sta., United States. Received March 21, 1990.

origin: United States. cultivar: KOSUZU. other id: PVP
9000110. source: Pending. group: PVPO. Cultivar.
Seed.

PI 538774. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Hyperformer Seed Co., United States. Received March 21, 1990.

origin: United States. cultivar: HSC 721. other id: PVP 9000111. source: Pending. group: PVPO. Cultivar. Seed.

PI 538775 to 538776. Catharanthus roseus (L.) G. Don APOCYNACEAE Vinca

Donated by: Denholm Seeds, United States. Received March 21, 1990.

- PI 538775 origin: United States. cultivar: PEPPERMINT COOLER. other id: PVP 9000112. source: Pending. group: PVPO. Cultivar. Seed.
- PI 538776 origin: United States. cultivar: GRAPE COOLER. other id: PVP 9000113. source: Pending. group: PVPO. Cultivar. Seed.

PI 538777 to 538778. Catharanthus roseus (L.) G. Don APOCYNACEAE Vinca

Donated by: University of Connecticut, United States. Received March 21, 1990.

PI 538777 origin: United States. cultivar: PRETTY IN PINK. other id: PVP 9000114. source: Pending. group: PVPO. Cultivar. Seed.

PI 538778 origin: United States. cultivar: PARASOL. other id: PVP 9000115. source: Pending. group: PVPO. Cultivar. Seed.

PI 538779. Carthamus tinctorius L. ASTERACEAE Safflower

Donated by: Research and Development Institute, Inc., United States. Received March 21, 1990.

origin: United States. cultivar: CENTENNIAL. other id: PVP 9000116. source: Pending. group: PVPO. Cultivar. Seed.

PI 538780. Pisum sativum L. FABACEAE Pea

Donated by: Rogers Brothers Seed Co., United States. Received March 21, 1990.

origin: United States. cultivar: DELSEY. other id: PVP 9000117. source: Pending. group: PVPO. Cultivar. Seed.

PI 538781. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Delta and Pine Land Co., United States. Received March 21, 1990.

origin: United States. cultivar: DELTAPINE 878. other id: PVP 9000118. source: Pending. group: PVPO. Cultivar. Seed.

PI 538782 to 538784. Agrostis gigantea Roth POACEAE Red top

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

PI 538782 to 538784-continued

- PI 538782 donor id: AJC062. origin: USSR. collected: August 17, 1988. collector id: AJC062. other id: 087. locality: SW face, 4km NW of Cherga, Altai region. elevation: 1000m. received as: Agrostis alba. Wild. Seed.
- PI 538783 donor id: AJCO63. origin: USSR. collected: August 14, 1988. collector id: AJCO63. other id: 314. locality: Along Katun River, near Yust-Sema, Altai region. elevation: 914m. remarks: Associated species: Festuca pratense, Deschampia. received as: Agrostis alba. Wild. Seed.
- PI 538784 donor id: AJCO64. origin: USSR. collected: August 15, 1988. collector id: AJCO64. other id: 320. locality: Heavily grazed area, Yubagon Pass, Altai region, Siberia. elevation: 1372m. received as: Agrostis alba. Wild. Seed.
- PI 538785. Agrostis tenuis Sibth. POACEAE Colonial bluegrass

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJCO65. origin: USSR. collected: August 26, 1988. collector id: AJCO65. other id: 212. locality: Bank of Ural River, sandy, 12.8km E of Kruchkovka, Orenburg region. received as: Agrostis vulgaris. Wild. Seed.

PI 538786 to 538787. Allium sp. LILIACEAE

- PI 538786 donor id: AJCO66. origin: USSR. collected: August 17, 1988. collector id: AJCO66. other id: 374. locality: Mixed grass/forbs community, shallow, rocky soil, S facing slope, 5km S of Cherga, Altai Mountains, Siberia. elevation: 724m. Wild. Seed.
- PI 538787 donor id: AJCO67. origin: USSR. collected: August 15, 1988. collector id: AJCO67. other id: 447. locality: Yubagon Pass, Altai region. elevation: 1372m. Wild. Seed.

PI 538788. Alopecurus pratensis L. POACEAE Meadow foxtail

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJCO69. origin: USSR. collected: August 17, 1988. collector id: AJCO69. other id: 193. locality: Gregarin State Farm, ungrazed and uncut area alongside road and hay fields, mixed grass/forbs, 15km SE of Karavanniy, Orenburg region. remarks: Precipitation 280mm. Wild. Seed.

PI 538789. Alopecurus sp. POACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJCO68. origin: USSR. collected: August 16, 1988. collector id: AJCO68. other id: 239. locality: 10km E of Yubagon Pass, Altai region, Siberia. elevation: 1448m. Wild. Seed.

PI 538790 to 538791. Alopecurus arundinaceus Poir. POACEAE Creeping foxtail

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

- PI 538790 donor id: AJCO70. origin: USSR. collected: August 17, 1988. collector id: AJCO70. other id: 370. locality: S facing slope, mixed grass/forb community, shallow rocky soil, 5km S of Cherga, Altai Mountains, Siberia. elevation: 724m. received as: Alopecurus ventricosis. Wild. Seed.
- PI 538791 donor id: AJCO71. origin: USSR. collected: August 18, 1988. collector id: AJCO71. other id: 262. locality: Along river bottom, 4km N of Gorno-Altysk, Altai region, Siberia. elevation: 457m. received as: Alopecurus ventricosis. Wild. Seed.
- PI 538792. Amaranthus caudatus L. AMARANTHACEAE

PI 538792-continued

donor id: AJCO72. origin: USSR. origin institute: Institute of Cytology & Genetics, Siberian Branch of Academy of Science, Novosibirsk. collected: January 20, 1989. collector id: AJCO72. other id: 344. locality: Experimental farm, Cherga. Cultivated. Seed.

PI 538793. Amaranthus graecizans L. AMARANTHACEAE Prostrate amaranth

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJCO73. origin: USSR. origin institute:
Institute of Cytology & Genetics, Siberian Branch of
Academy of Science, Novosibirsk. collected: January 20,
1989. collector id: AJCO73. other id: 341. locality:
Experimental farm, Cherga. Cultivated. Seed.

PI 538794. Amaranthus lividus L. AMARANTHACEAE Livid amaranth

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJCO74. origin: USSR. origin institute: Institute of Cytology & Genetics, Siberian Branch of Academy of Science, Novosibirsk. collected: January 20, 1989. collector id: AJCO74. other id: 345. locality: Experimental farm, Cherga. Cultivated. Seed.

PI 538795. Amaranthus cruentus L. AMARANTHACEAE Prince's feather

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJCO75. origin: USSR. origin institute:
Institute of Cytology & Genetics, Siberian Branch of
Academy of Science, Novosibirsk. collected: January 20,
1989. collector id: AJCO75. other id: 343. locality:
Experimental farm, Cherga. received as: Amaranthus
paniculatus. Cultivated. Seed.

PI 538796. Amaranthus powellii S. Watson AMARANTHACEAE

PI 538796-continued

donor id: AJCO76. origin: USSR. origin institute: Institute of Cytology & Genetics, Siberian Branch of Academy of Science, Novosibirsk. collected: January 20, 1989. collector id: AJCO76. other id: 346. locality: Experimental farm, Cherga. Cultivated. Seed.

PI 538797. Amaranthus spinosus L. AMARANTHACEAE Spiny amaranth

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJCO77. origin: USSR. origin institute: Institute of Cytology & Genetics, Siberian Branch of Academy of Science, Novosibirsk. collected: January 20, 1989. collector id: AJCO77. other id: 342. locality: Experimental farm, Cherga. Cultivated. Seed.

PI 538798 to 538799. Astragalus falcatus Lam. FABACEAE Russian sickle milkvetch

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

- PI 538798 donor id: AJCO78. origin: USSR. origin institute:
 Institute of Cytology & Genetics, Siberian Branch of
 Academy of Science, Novosibirsk. collected: January 20,
 1989. collector id: AJCO78. other id: 335. locality:
 Experimental farm, Cherga. Cultivated. Seed.
- PI 538799 donor id: AJCO79. origin: USSR. origin institute:
 Institute of Cytology & Genetics, Siberian Branch of
 Academy of Science, Novosibirsk. collected: January 20,
 1989. collector id: AJCO79. other id: 336. locality:
 Experimental farm, Cherga. Cultivated. Seed.
- PI 538800. Avena sp. POACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJCO81. origin: USSR. collected: August 15, 1988. collector id: AJCO81. other id: 241. locality: Rocky hillside, Tinginskiy region, Altai Mountains, Siberia. Wild. Seed.

PI 538801. Avena fatua L. POACEAE Red oats

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJCO82. origin: USSR. collected: August 14, 1988. collector id: AJCO82. other id: 316. locality: Roadside, Kamlak, Altai region. remarks: Sample obtained from 2 panicles of 1 plant. Wild. Seed.

PI 538802. Astragalus onobrychis L. FABACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJCO80. origin: USSR. collected: August 17, 1988. collector id: AJCO80. other id: 418. locality: Dry hillside, S exposure, 5km S of Cherga, Altai Mountains, Siberia. elevation: 876m. Wild. Seed.

PI 538803 to 538804. Avenula pubescens (Huds.) Dumort. POACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

- PI 538803 donor id: AJCO83. origin: USSR. collected: August 15, 1988. collector id: AJCO83. other id: 270. locality: Altai region, Siberia. remarks: Pubescent oat. Associated species: Bromus and Poa. received as: Avena pubescens. Wild. Seed.
- PI 538804 donor id: AJCO84. origin: USSR. collected: August 17, 1988. collector id: AJCO84. other id: 267. locality: Mixed grass/forb meadow in valley bottom, 5km S of Cherga, Altai Mountains, Siberia. elevation: 724m. received as: Avena pubescens. Wild. Seed.
- PI 538805. Beckmannia sp. POACEAE

PI 538805-continued

donor id: AJCO85. origin: USSR. origin institute: Institute of Cytology & Genetics, Siberian Branch of Academy of Science, Novosibirsk. collected: August 14, 1988. collector id: AJCO85. other id: 264. locality: Experimental farm, Cherga. elevation: 2375m. Cultivated. Seed.

PI 538806. Beckmannia syzigachne (Steud.) Fern. POACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJCO88. origin: USSR. collected: August 17,
1988. collector id: AJCO88. other id: 369. locality:
Kukuya, 25km W of Cherga, Altai region, Siberia.
elevation: 1000m. Wild. Seed.

PI 538807 to 538873. Bromus inermis Leyss. POACEAE Smooth bromegrass

- PI 538807 donor id: AJCO89. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 44582. collected: 1987. collector id: AJCO89. locality: Barta Lithuanian SSR. Wild. Seed.
- PI 538808 donor id: AJCO90. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 42408. collected: 1986. collector id: AJCO90. locality: Kulturnyj Lipeck Region. Wild. Seed.
- PI 538809 donor id: AJCO91. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 36087. collected: 1986. collector id: AJCO91. locality: Ubilenjnyi Leningrad Region. Wild. Seed.
- PI 538810 donor id: AJCO92. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 45237. collected: 1986. collector id: AJCO92. locality: Bijskij mestnyj. Wild. Seed.
- PI 538811 donor id: AJCO93. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 42390. collected: 1987. collector id: AJCO93. locality: Odicavsij mestnyi Penza Region. Wild. Seed.

- PI 538812 donor id: AJCO94. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 44130. collected: 1985. collector id: AJCO94. locality: Yuzno-Uralskij Orenburg. Wild. Seed.
- PI 538813 donor id: AJCO95. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 44125. collected: 1985. collector id: AJCO95. locality: Balasovskij mestnyi Sartov Region. Wild. Seed.
- PI 538814 donor id: AJCO96. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 35830. collected: 1985. collector id: AJCO96. locality: Krasnodarskij I Krasnodar Territory. Wild. Seed.
- PI 538815 donor id: AJCO97. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 44914. collected: 1985. collector id: AJCO97. locality: Jalan Bashkir, ASSR. Wild. Seed.
- PI 538816 donor id: AJCO98. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 39945. collected: 1985. collector id: AJCO98. locality: Kenonskij. Wild. Seed.
- PI 538817 donor id: AJCO99. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 36096. collected: 1986. collector id: AJCO99. locality: Krasnodarskij 24 Krasnodar Territory. Wild. Seed.
- PI 538818 donor id: AJC100. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 38037. collected: 1987. collector id: AJC100. locality: Dedinovskij 3 Moscow Region. Wild. Seed.
- PI 538819 donor id: AJC101. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 35621. collected: 1985. collector id: AJC101. locality: Uzungyrskij Kirgiz, SSR. Wild. Seed.
- PI 538820 donor id: AJC102. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 43630. collected: 1987. collector id: AJC102. locality: Majak Habarovsk. Wild. Seed.
- PI 538821 donor id: AJC103. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 42395. collected: 1986. collector id: AJC103. locality: Local Saratov Region. Wild. Seed.

- PI 538822 donor id: AJC104. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 38057. collected: 1986. collector id: AJC104. locality: Primorskij mestnyi Primorskaya Province. Wild. Seed.
- PI 538823 donor id: AJC105. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 42816. collected: 1986. collector id: AJC105. locality: Skalva Lithuanian SSR. Wild. Seed.
- PI 538824 donor id: AJC106. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 44079. collected: 1986. collector id: AJC106. locality: Ekstra 15/2 Stavropol Territory. Wild. Seed.
- PI 538825 donor id: AJC107. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 42817. collected: 1986. collector id: AJC107. locality: N2-67 Chita Region. Wild. Seed.
- PI 538826 donor id: AJC108. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 42313. collected: 1987. collector id: AJC108. locality: N2698 Novosibirsk Region. Wild. Seed.
- PI 538827 donor id: AJC109. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 44136. collected: 1987. collector id: AJC109. locality: Primorskij 46 Primorskij Province. Wild. Seed.
- PI 538828 donor id: AJC110. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 35623. collected: 1986. collector id: AJC110. locality: Vozvysenskij. Wild. Seed.
- PI 538829 donor id: AJC111. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 36202. collected: 1986. collector id: AJC111. locality: Local Perm. Wild. Seed.
- PI 538830 donor id: AJC112. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 45200. collected: 1987. collector id: AJC112. locality: Habarovskij Habarovsk Territory. Wild. Seed.
- PI 538831 donor id: AJC113. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 38306. collected: 1986. collector id: AJC113. locality: Limannyj. Wild. Seed.

- PI 538832 donor id: AJCll4. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 36268. collected: 1987. collector id: AJCll4. locality: Morsanskij 312 Tambov Region. Wild. Seed.
- PI 538833 donor id: AJC115. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 43626. collected: 1986. collector id: AJC115. locality: Local Tambov Region. Wild. Seed.
- PI 538834 donor id: AJC116. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 42391. collected: 1987. collector id: AJC116. locality: Odicavsij mestnyj Penza Region. Wild. Seed.
- PI 538835 donor id: AJC117. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 39829. collected: 1987. collector id: AJC117. locality: Zonalnyj Altai Territory. Wild. Seed.
- PI 538836 donor id: AJC118. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 44581. collected: 1987. collector id: AJC118. locality: Morsanec Tambov Region. Wild. Seed.
- PI 538837 donor id: AJC119. origin: USSR. collected: August 17, 1988. collector id: AJC119. other id: 69. locality: SW face, 4km NW of Cherga, Altai regon. elevation: 1000m. Wild. Seed.
- PI 538838 donor id: AJC120. origin: USSR. collected: August 17, 1988. collector id: AJC120. other id: 74. locality: SW face, 4km NW of Cherga, Altai region. elevation: 1300m. Wild. Seed.
- PI 538839 donor id: AJC121. origin: USSR. collected: August 20, 1988. collector id: AJC121. other id: 84. locality: Local meadows, on front of Dam, Medeo, near Altma Ata, Kazakhstan. elevation: 2027m. Wild. Seed.
- PI 538840 donor id: AJC122. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. cultivar: SHEBALINO 5. collected: January 20, 1989. collector id: AJC122. other id: 102. other id: K-286. Cultivar. Seed.
- PI 538841 donor id: AJC123. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. cultivar: KRUTIKHA 6. collected: January 20, 1989. collector id: AJC123. other id: 103. other id: K-437. Cultivar. Seed.

PI 538807 to 538873-continued

- PI 538842 donor id: AJC124. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. cultivar: CHEMEROVKA 3. collected: January 20, 1989. collector id: AJC124. other id: 104. other id: K-285. Cultivar. Seed.
- PI 538843 donor id: AJCl25. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJCl25. other id: 105. other id: K-812. locality: Altai low hills. Wild. Seed.
- PI 538844 donor id: AJC126. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. cultivar: POTERYAESKY. collected: January 20, 1989. collector id: AJC126. other id: 106. other id: K-144. Cultivar. Seed.
- PI 538845 donor id: AJC127. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC127. other id: 107. other id: K-441. Cultivated. Seed.
- PI 538846 donor id: AJC128. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. cultivar: MALINOVKA 2. collected: January 20, 1989. collector id: AJC128. other id: 108. other id: K-439. Cultivar. Seed.
- PI 538847 donor id: AJC129. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. cultivar: PANKRUSHIKHA 4. collected: January 20, 1989. collector id: AJC129. other id: 109. other id: K-404. Cultivar. Seed.
- PI 538848 donor id: AJC130. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. cultivar: PRYGANKA 2. collected: January 20, 1989. collector id: AJC130. other id: 110. other id: K-438. Cultivar. Seed.
- PI 538849 donor id: AJCl3l. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. cultivar: DOSKOY 43. collected: January 20, 1989. collector id: AJCl3l. other id: Ill. other id: K-810. Cultivar. Seed.
- PI 538850 donor id: AJC132. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. cultivar: ELO 20. collected: January 20, 1989. collector id: AJC132. other id: 112. other id: K-283. Cultivar. Seed.
- PI 538851 donor id: AJC133. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. cultivar: ELO 9. collected: January 20, 1989. collector id: AJC133. other id: K-149. Cultivar. Seed.

- PI 538852 donor id: AJC134. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. cultivar: SHELOBOLIKHA 2. collected: January 20, 1989. collector id: AJC134. other id: K-434. Cultivar. Seed.
- PI 538853 donor id: AJC135. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. cultivar: OBSKOY 9. collected: January 20, 1989. collector id: AJC135. other id: K-541. Cultivar. Seed.
- PI 538854 donor id: AJCl36. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJCl36. other id: K-810. locality: Obj River flood plain. Wild. Seed.
- PI 538855 donor id: AJCl37. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. cultivar: OZERKI 9. collected: January 20, 1989. collector id: AJCl37. other id: K-820. Cultivar. Seed.
- PI 538856 donor id: AJC138. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. cultivar: YAROROYE 8. collected: January 20, 1989. collector id: AJC138. other id: 118. Cultivar. Seed.
- PI 538857 donor id: AJC139. origin: USSR. collected: August 19, 1988. collector id: AJC139. other id: 157. locality: From train, railroad stop #16 on route from Novosibirsk to Alma Ata, Kazakhstan. elevation: 945m. Wild. Seed.
- PI 538858 donor id: AJC140. origin: USSR. collected: August 26, 1988. collector id: AJC140. other id: 228. locality: Wooded site, sandy ridge along river, Chkalov State farm, just E of Blagoslovienka village. remarks: Associated with cottonwoods and willow. Wild. Seed.
- PI 538859 donor id: AJC141. origin: USSR. collected: August 26, 1988. collector id: AJC141. other id: 233. locality: Mixed grass/forbs, ungrazed and uncut area alongside road and hay fields, Gregarin State farm, Karavanniy, 15km SE of Karavanniy, Orenburg region. remarks: 280mm precipitation. Wild. Seed.
- PI 538860 donor id: AJC142. origin: USSR. collected: August 13, 1988. collector id: AJC142. other id: 292. locality: Waste area near airport, Gorno-Altysk, Altai region. elevation: 579m. remarks: Associated with Dactylis, Melilotus, and Timothy. Ten plants sampled. Wild. Seed.

- PI 538861 donor id: AJC143. origin: USSR. collected: August 15, 1988. collector id: AJC143. other id: 353. locality: Cemetery, Tuekta, Altai region, Siberia. Wild. Seed.
- PI 538862 donor id: AJC144. origin: USSR. collected: August 17, 1988. collector id: AJC144. other id: 395. locality: Mixed grass/forb, meadow in valley bottom, 5km S of Cherga, Altai Mountains, Siberia. elevation: 722m. Wild. Seed.
- PI 538863 donor id: AJC145. origin: USSR. collected: August 15, 1988. collector id: AJC145. other id: 397. locality: Hillside meadow, N facing slope, 10km N Tuekta, Altai region, Siberia. elevation: 1216m. Wild. Seed.
- PI 538864 donor id: AJC146. origin: USSR. collected: August 14, 1988. collector id: AJC146. other id: 399. locality: Random, roadside lots, along Sema River, Cherga, Altai region. Wild. Seed.
- PI 538865 donor id: AJC147. origin: USSR. collected: August 16, 1988. collector id: AJC147. other id: 433. locality: 5km W of Yubagon Pass, Altai region, Siberia. elevation: 1372m. Wild. Seed.
- PI 538866 donor id: AJC148. origin: USSR. collected: August 18, 1988. collector id: AJC148. other id: 443. locality: Heavily grazed, along river bottom, 4km N of Gorno-Altysk, Altai region, Siberia. elevation: 472m. Wild. Seed.
- PI 538867 donor id: AJC149. origin: USSR. collected: August 14, 1988. collector id: AJC149. other id: 446. locality: Open ungrazed meadow, Kamlak, Altai region. remarks: Five plants sampled. Wild. Seed.
- PI 538868 donor id: AJC150. origin: USSR. collected: August 15, 1988. collector id: AJC150. other id: 458. locality: Across road from Tuekta, growing in white fence, (Memorial to Soviet Socialist Revolution), Tuekta, Altai region. remarks: Population 2 plants. Wild. Seed.
- PI 538869 donor id: AJC151. origin: USSR. collected: August 13, 1988. collector id: AJC151. other id: 461. locality: Roadside, 70km from Gorno-Altysk, Cherepanovsky, Novosibirsk region. elevation: 122m. Wild. Seed.
- PI 538870 donor id: AJC152. origin: USSR. collected: August 14, 1988. collector id: AJC152. other id: 462. locality: Open meadow near road, Cherga, Altai region. Wild. Seed.

PI 538807 to 538873-continued

- PI 538871 donor id: AJC153. origin: USSR. collected: August 13, 1988. collector id: AJC153. other id: 468. locality:
 Open area, hay field, Cherepanovsky, Novosibirsk region.
 elevation: 122m. remarks: Associated with Dactylis glomerata. Wild. Seed.
- PI 538872 donor id: AJC154. origin: USSR. collected: August 14, 1988. collector id: AJC154. other id: 469. locality: Heavily grazed, alongside foot path, Yust-Sema, Altai region. remarks: One panicle sampled. Wild. Seed.
- PI 538873 donor id: AJC155. origin: USSR. collected: August 13, 1988. collector id: AJC155. other id: 472. locality: Wooded poplar, Cherepanovsky, Novosibirsk region. remarks: Fifty panicles sampled. Wild. Seed.

PI 538874 to 538876. Bromus sp. POACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

- PI 538874 donor id: AJC156. origin: USSR. collected: August 24, 1988. collector id: AJC156. other id: 031. locality: Edge of road, no grazing, dry, Martuk, on route from Aktyubinsk to Orenburg, 15km WNW of Martuk. remarks: Few plants sampled. Wild. Seed.
- PI 538875 donor id: AJC157. origin: USSR. collected: August 24, 1988. collector id: AJC157. other id: 050. locality: Sand, Altikarasu, Khazak plain. remarks: 165mm precipitation. Wild. Seed.
- PI 538876 donor id: AJC158. origin: USSR. collected: August 26, 1988. collector id: AJC158. other id: 204. locality: Shelter belt of trees and grass, Ivanovka, 3km E of Ivanovka, Orenburg region. Wild. Seed.

PI 538877 to 538878. Bromus squarrosus L. POACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

PI 538877 donor id: AJC159. origin: USSR. collected: August 25, 1988. collector id: AJC159. other id: 042. locality: Edge of road, no grazing, dry, on route from Aktyubinsk to Orenburg, 15km WNW of Martuk. Wild. Seed.

- PI 538877 to 538878-continued
 - PI 538878 donor id: AJC160. origin: USSR. collected: August 26, 1988. collector id: AJC160. other id: 202. locality: Shelter belt of trees and grass, Ivanovka, 3km E of Ivanovka, Orenburg region. Wild. Seed.
- PI 538879 to 538881. Calamagrostis epigeios (L.) Roth POACEAE

- PI 538879 donor id: AJC161. origin: USSR. collected: August 26, 1988. collector id: AJC161. other id: 209. locality: Ungrazed and uncut area roadside and hay fields, mixed grass/forbs, Gregarin State farm, 15km SE of Karavanniy, Orenburg region. remarks: 280mm precipitation. Wild. Seed.
- PI 538880 donor id: AJC163. origin: USSR. collected: August 17, 1988. collector id: AJC163. other id: 323. locality: Top of pass, Kukuya, 30km W of Cherga, Altai region, Siberia. elevation: 1200m. Wild. Seed.
- PI 538881 donor id: AJC166. origin: USSR. collected: August 22, 1988. collector id: AJC166. other id: 231. locality: Along highway, Molo 2, 5km SE of Molodetskoye, Karaganda region. elevation: 183m. remarks: No grazing pressure. Wild. Seed.
- PI 538882 to 538885. Calamagrostis sp. POACEAE

- PI 538882 donor id: AJC162. origin: USSR. collected: August 23, 1988. collector id: AJC162. locality: Lowland pasture, sandy area next to pond, State farm, Saraldjy, Aktyubinsk region, Kazakhstan. Wild. Seed.
- PI 538883 donor id: AJC164. origin: USSR. collected: August 17, 1988. collector id: AJC164. other id: 368. locality: Mixed grass/forbs meadow in valley bottom, 5km S of Cherga, Altai Mountains, Siberia. elevation: 724m. Wild. Seed.

PI 538882 to 538885-continued

PI 538884 donor id: AJC165. origin: USSR. collected: August 20, 1988. collector id: AJC165. other id: 156. locality: Mixed grass/forbs top of Dam, Medeo Dam site, near Alma Ata. elevation: 2022m. remarks: Seed for 1968 planting came from local meadows. Cultivated. Seed.

PI 538885 donor id: AJC167. origin: USSR. collected: August 15, 1988. collector id: AJC167. other id: 248. locality: 10km N of Tuekta, Altai region, Siberia. remarks: Clones large. Cultivated. Seed.

PI 538886. Carum sp. APIACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJC168. origin: USSR. collected: August 17, 1988. collector id: AJC168. other id: 373. locality: Top of Kukuyu Pass, 30km W of Cherga, Altai region. elevation: 1200m. Wild. Seed.

PI 538887. UNIDENT-Fabaceae sp. FABACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJC169. origin: USSR. collected: August 17, 1988. collector id: AJC169. other id: 324. locality: Top of Kukuyu Pass, 30km W of Cherga, Altai region. elevation: 1200m. received as: Chena silvestre. Wild. Seed.

PI 538888. Citrullus sp. CUCURBITACEAE Watermelon

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJC581. origin: USSR. collected: August 17, 1988. collector id: AJC581. other id: 097. locality: Cherga, Altai Mountains. Cultivated. Seed.

PI 538889. Cucumis sp. CUCURBITACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJC474. origin: USSR. collected: August 23, 1988. collector id: AJC474. other id: 187. locality: Oktober State farm, Khazakhstan. Cultivated. Seed.

- PI 538890 to 538919. Dactylis glomerata L. POACEAE Orchardgrass
 - Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.
 - PI 538890 donor id: AJC172. origin: USSR. collected: August 17, 1988. collector id: AJC172. other id: 052. locality: SW face, 4km NW of Cherga, Altai region. elevation: 1300m. Wild. Seed.
 - PI 538891 donor id: AJC173. origin: USSR. collected: August 17, 1988. collector id: AJC173. other id: 072. locality: SW face, 4km NW of Cherga, Altai region. elevation: 1000m. remarks: One huge tiller and panicle. Wild. Seed.
 - PI 538892 donor id: AJC175. origin: USSR. collected: August 17, 1988. collector id: AJC175. other id: 075. locality: Ungrazed, mixed grass/forb meadow, SE slope, 4km NW of Cherga, Altai region. elevation: 1000m. Wild. Seed.
 - PI 538893 donor id: AJC176. origin: USSR. collected: August 20, 1988. collector id: AJC176. other id: 081. locality: Mixed grass/forb, top of Dam, Medeo Dam site, near Alma Ata. elevation: 2022m. remarks: Seed for 1968 planting came from local meadows. Wild. Seed.
 - PI 538894 donor id: AJC177. origin: USSR. collected: August 17, 1988. collector id: AJC177. other id: 096. locality: 4km N of Cherga, Altai region, Siberia. elevation: 1200m. remarks: Plants tall, 1.5m. Wild. Seed.
 - PI 538895 donor id: AJC178. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC178. other id: 147. other id: K-131. locality: Obj River forest steppe. Wild. Seed.
 - PI 538896 donor id: AJC179. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. cultivar: CHEMRSOKA 4. collected: January 20, 1989. collector id: AJC179. other id: 148. Cultivar. Seed.

- PI 538897 donor id: AJC180. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC180. other id: 149. other id: K-952. locality: Obj River forest steppe. Cultivar. Seed.
- PI 538898 donor id: AJC181. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. cultivar: SOROKINO 7. collected: January 20, 1989. collector id: AJC181. other id: 151. locality: Altai region. Cultivar. Seed.
- PI 538899 donor id: AJC182. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC182. other id: 152. other id: K-964. locality: Altai hillsteppe zone. Wild. Seed.
- PI 538900 donor id: AJC183. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC183. other id: 153. other id: K-954. locality: Obj River forest steppe. Wild. Seed.
- PI 538901 donor id: AJC184. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. cultivar: YABOKAR 42. collected: January 20, 1989. collector id: AJC184. other id: 150. Cultivar. Seed.
- PI 538902 donor id: AJC188. origin: USSR. collected: August 13, 1988. collector id: AJC188. locality: Near airport, Gorno-Altysk, Altai Mountains. elevation: 578m. remarks: Associated species: Phleum, Bromus, and Melilotus. Wild. Seed.
- PI 538903 donor id: AJC189. origin: USSR. collected: August 14, 1988. collector id: AJC189. other id: 291. locality: Alpine meadow, mixed grass/forbs, near stream, Kamlak Pass, Altai region. remarks: Six plants sampled, all others too late. Wild. Seed.
- PI 538904 donor id: AJC190. origin: USSR. collected: August 13, 1988. collector id: AJC190. other id: 295. locality: Open hay field, Cherepanovsky, Novosibirsk region. elevation: 122m. Wild. Seed.
- PI 538905 donor id: AJC191. origin: USSR. collected: August 14, 1988. collector id: AJC191. other id: 296. locality: Roadside, Sema River, Cherga, Altai region. remarks: Fifteen plants sampled. Wild. Seed.
- PI 538906 donor id: AJC193. origin: USSR. collected: August 13, 1988. collector id: AJC193. other id: 329. locality: Roadside, 70km from Gorno-Altysk, Cherepanovsky, Novosibirsk region. elevation: 122m. Wild. Seed.

- PI 538907 donor id: AJC194. origin: USSR. origin institute:
 Institute of Cytology & Genetics, Siberian Branch of
 Academy of Science, Novosibirsk. collected: January 20,
 1989. collector id: AJC194. other id: 339. locality:
 Experimental farm, Cherga. Cultivated. Seed.
- PI 538908 donor id: AJC195. origin: USSR. origin institute:
 Institute of Cytology & Genetics, Siberian Branch of
 Academy of Science, Novosibirsk. collected: January 20,
 1989. collector id: AJC195. other id: 340. locality:
 Experimental farm, Cherga. Cultivated. Seed.
- PI 538909 donor id: AJC196. origin: USSR. collected: August 13, 1988. collector id: AJC196. other id: 349. locality: Birch understory, near Bersdsk, Siberia, Novosibirsk region. Wild. Seed.
- PI 538910 donor id: AJC197. origin: USSR. collected: August 15, 1988. collector id: AJC197. other id: 350. locality: Heavily grazed meadow, 5km E Yubagon Pass, Altai region. Wild. Seed.
- PI 538911 donor id: AJC198. origin: USSR. collected: August 14, 1988. collector id: AJC198. other id: 356. locality: Wooded area with birch and Pinus, Katun River, Yust Sema, Altai Mountains. elevation: 914m. remarks: One plant sampled. Wild. Seed.
- PI 538912 donor id: AJC201. origin: USSR. collected: August 14, 1988. collector id: AJC201. other id: 384. locality: Kamlak, Altai Mountains, Siberia. Wild. Seed.
- PI 538913 donor id: AJC202. origin: USSR. collected: August 17, 1988. collector id: AJC202. other id: 387. locality:
 Mixed grass/forb meadow, valley bottom, 5km S of Cherga, Altai Mountains, Siberia. elevation: 724m. Wild. Seed.
- PI 538914 donor id: AJC203. origin: USSR. collected: August 18, 1988. collector id: AJC203. other id: 388. locality: Heavily grazed, along river bottom, outskirts of Gorno-Altysk, Altai region, Siberia. elevation: 472m. Wild. Seed.
- PI 538915 donor id: AJC204. origin: USSR. collected: August 16, 1988. collector id: AJC204. other id: 417. locality: Rocky hillside, 2km W Yubagon Pass, Altai region. elevation: 1524m. Wild. Seed.
- PI 538916 donor id: AJC205. origin: USSR. collected: August 15, 1988. collector id: AJC205. other id: 440. remarks: Diploid. Wild. Seed.

- PI 538890 to 538919-continued
 - PI 538917 donor id: AJC207. origin: USSR. collected: August 16, 1988. collector id: AJC207. other id: 449. locality: 2km NW of Kamlak, Altai Mountains, Siberia. elevation: 671m. Wild. Seed.
 - PI 538918 donor id: AJC208. origin: USSR. collected: August 15, 1988. collector id: AJC208. other id: 450. locality: 10km N of Tuekta, Altai region, Siberia. Wild. Seed
 - PI 538919 donor id: AJC209. origin: USSR. collected: August 13, 1988. collector id: AJC209. other id: 466. locality: Wooded poplar area, Cherepanovsky, Novosibirsk region. remarks: Thirty panicles sampled. Wild. Seed.
- PI 538920. Dactylis glomerata L. subsp. glomerata POACEAE

donor id: AJC192. origin: USSR. collected: August 13, 1988. collector id: AJC192. other id: 297. locality: Bersdsk, Novosibirsk region. remarks: Fifty-one panicles sampled. Wild. Seed.

PI 538921. Dactylis glomerata subsp. lobata (Drejer) Lindb. f. POACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJC171. origin: Australia. developer country: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 35870. collected: 1987. collector id: AJC171. received as: D. glomerata subsp. aschersoniana. Wild. Seed.

PI 538922. Dactylis glomerata subsp. woronowii (Ovcz.) Stebbins& Zohary POACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJC170. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 45669. collected: 1986. collector id: AJC170. locality: Azerbaijan, SSR. received as: D. glomerata subsp. woconowii. Wild. Seed.

- PI 538923 to 538930. Deschampsia caespitosa (L.) Beauv. POACEAE Tufted hairgrass
 - Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.
 - PI 538923 donor id: AJC210. origin: USSR. collected: August 18, 1988. collector id: AJC210. other id: 299. locality: Along river bottom, 4km N of Gorno-Altysk, Altai region, Siberia. elevation: 472m. Wild. Seed.
 - PI 538924 donor id: AJC211. origin: USSR. collected: August 14, 1988. collector id: AJC211. other id: 300. locality: Shebalino, Altai Mountains, Siberia. Wild. Seed.
 - PI 538925 donor id: AJC212. origin: USSR. collected: August 15, 1988. collector id: AJC212. other id: 301. locality: Topuchee, Altai Mountains, Siberia. Wild. Seed.
 - PI 538926 donor id: AJC213. origin: USSR. collected: August 14, 1988. collector id: AJC213. other id: 385. locality: Along Katun River, Yust-Sema, Altai Mountains, Siberia. elevation: 914m. Wild. Seed.
 - PI 538927 donor id: AJC214. origin: USSR. collected: August 16, 1988. collector id: AJC214. other id: 419. locality: Rocky hillside, 2km W of Yubagon Pass, Altai region. elevation: 1520m. Wild. Seed.
 - PI 538928 donor id: AJC215. origin: USSR. collected: August 16, 1988. collector id: AJC215. other id: 438. locality: 10km to Yugabon Pass, Altai region, Siberia. Wild. Seed.
 - PI 538929 donor id: AJC216. origin: USSR. collected: August 17, 1988. collector id: AJC216. other id: 456. locality: 12km SE of Cherga, Altai Mountains, Siberia. elevation: 1128m. Wild. Seed.
 - PI 538930 donor id: AJC217. origin: USSR. collected: August 15, 1988. collector id: AJC217. other id: 474. locality: Topuchee, Altai Mountains, Siberia. Wild. Seed.
- PI 538931. Festuca arundinacea Schreber POACEAE Tall fescue

PI 538931-continued

donor id: AJC329. origin: USSR. collected: August 20, 1988. collector id: AJC329. other id: 163. locality: Near top of Dam, Medeo Dam site, near Alma Ata. remarks: Associated species: Bromus inermis. Original seed from native meadow. Wild. Seed.

- PI 538932 to 538934. Festuca ovina L. POACEAE Sheep fescue
 - Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.
 - PI 538932 donor id: AJC330. origin: USSR. collected: August 26, 1988. collector id: AJC330. other id: 197. locality: Ungrazed and uncut area alongside road and hay fields, mixed grass/forbs, Gregarin State farm, 15km SE of Karavanniy, Orenburg region. Wild. Seed.
 - PI 538933 donor id: AJC331. origin: USSR. origin institute:
 Institute of Cytology & Genetics, Siberian Branch of
 Academy of Science, Novosibirsk. collected: January 20,
 1989. collector id: AJC331. other id: 331. locality:
 Experimental farm, Cherga. Cultivated. Seed.
 - PI 538934 donor id: AJC332. origin: USSR. origin institute:
 Institute of Cytology & Genetics, Siberian Branch of
 Academy of Science, Novosibirsk. collected: January 20,
 1989. collector id: AJC332. other id: 332. locality:
 Experimental farm, Cherga. Cultivated. Seed.
- PI 538935 to 538958. Festuca pratensis Hudson POACEAE Meadow fescue
 - Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.
 - PI 538935 donor id: AJC333. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 35059. collected: 1983. collector id: AJC333. locality: Sujdinskaja. Wild. Seed.
 - PI 538936 donor id: AJC334. origin: USSR. collected: August 17, 1989. collector id: AJC334. other id: 067. locality: SW face, 4km NW of Cherga, Altai region. elevation: 1300m. Wild. Seed.
 - PI 538937 donor id: AJC335. origin: USSR. collected: August 17, 1989. collector id: AJC335. other id: 080. locality: 3km N of Cherga, Altai region, Siberia. elevation: 1000m. Wild. Seed.

- PI 538938 donor id: AJC336. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC336. other id: 142. other id: K-073563. locality: Tumen region. Wild. Seed.
- PI 538939 donor id: AJC337. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC337. other id: 143. other id: K-069008. locality: Altai region. Wild. Seed.
- PI 538940 donor id: AJC338. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC338. other id: 144. other id: K-073556. locality: Tumen region. Wild. Seed.
- PI 538941 donor id: AJC339. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC339. other id: 145. other id: K-073566. locality: Tumen region. Wild. Seed.
- PI 538942 donor id: AJC340. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC340. other id: 146. other id: K-073556. locality: Tumen region. Wild. Seed.
- PI 538943 donor id: AJC341. origin: USSR. collected: August 14, 1988. collector id: AJC341. other id: 315. locality: Along roadside, Sema River, Cherga, Altai region. remarks: Thirty to thirty-five plants sampled. Wild. Seed.
- PI 538944 donor id: AJC342. origin: USSR. collected: August 14, 1988. collector id: AJC342. other id: 325. locality: Grazed pasture, Shebalino, Altai region. remarks: Thirty plants sampled. Wild. Seed.
- PI 538945 donor id: AJC343. origin: USSR. collected: August 14, 1988. collector id: AJC343. other id: 348. locality: Ungrazed edge of pasture, Shebalino, Altai region. remarks: Twenty-seven plants sampled. Wild. Seed.
- PI 538946 donor id: AJC344. origin: USSR. collected: August 18, 1988. collector id: AJC344. other id: 357. locality: Along river bottom, heavily grazed, 4km N of Gorno-Altysk, Altai region, Siberia. elevation: 472m. Wild. Seed.
- PI 538947 donor id: AJC345. origin: USSR. collected: August 14, 1988. collector id: AJC345. other id: 358. locality: Wet area along streamside, Cherga, Altai region. remarks: Mixed grass and sedge. Thirty-nine plants sampled. Wild. Seed.

- PI 538948 donor id: AJC346. origin: USSR. collected: August 14, 1988. collector id: AJC346. other id: 361. locality: Open meadow, ungrazed, Kamlak, Altai region. remarks: Associated with some pine and birch. Thirty to forty plants sampled. Wild. Seed.
- PI 538949 donor id: AJC347. origin: USSR. collected: August 17, 1988. collector id: AJC347. other id: 363. locality: Near Ulus Village, Altai region, Siberia. elevation: 900m. Wild. Seed.
- PI 538950 donor id: AJC348. origin: USSR. collected: August 15, 1988. collector id: AJC348. other id: 366. locality: Grass-legume meadow, N facing slope, 10km N of Tuekta, Altai region, Siberia. elevation: 1216m. Wild. Seed.
- PI 538951 donor id: AJC349. origin: USSR. collected: August 17, 1988. collector id: AJC349. other id: 396. locality: Mixed grass/forb meadow, valley bottom, 5km S of Cherga, Altai Mountains. elevation: 724m. Wild. Seed.
- PI 538952 donor id: AJC350. origin: USSR. collected: August 14, 1988. collector id: AJC350. other id: 425. locality: Along ridge, heavily grazed and trampled, foot and cattle trails, mixed grass/forbs, Yust-Sema, Altai region. remarks: Twenty plants sampled. Wild. Seed.
- PI 538953 donor id: AJC351. origin: USSR. collected: August 14, 1988. collector id: AJC351. other id: 426. locality: Wooded area, along Katun River, Yust-Sema, Altai Mountains. elevation: 912m. remarks: Twenty-one plants sampled. Associated with birch and pine. Wild. Seed.
- PI 538954 donor id: AJC352. origin: USSR. collected: August 15, 1988. collector id: AJC352. other id: 428. locality: S face, grass/forb meadow, ungrazed, Kamlak Pass, Altai region. Wild. Seed.
- PI 538955 donor id: AJC353. origin: USSR. collected: August 16, 1988. collector id: AJC353. other id: 427. locality: 10km E of Yubagon Pass, Altai region. Wild. Seed.
- PI 538956 donor id: AJC354. origin: USSR. collected: August 15, 1988. collector id: AJC354. other id: 429. locality: Ungrazed alpine meadows, mixed grass/forbs, Kamlak Pass, Altai region. Wild. Seed.
- PI 538957 donor id: AJC355. origin: USSR. collected: August 14, 1988. collector id: AJC355. other id: 441. locality: 1.5-2.4m above streamside, just into hillside, mixed grass/forb, Cherga, Altai region. remarks: Fifty-one plants sampled. Wild. Seed.

- PI 538935 to 538958-continued
 - PI 538958 donor id: AJC356. origin: USSR. collected: August 14, 1988. collector id: AJC356. other id: 445. locality: 15-21m above streamside, Cherga, Altai region. remarks: Nineteen panicles sampled. Wild. Seed.
- PI 538959 to 538960. Festuca rubra L. POACEAE

- PI 538959 donor id: AJC357. origin: USSR. collected: August 20, 1988. collector id: AJC357. other id: 162. locality: Mixed grass/forbs, top of Dam, Medeo Dam site, near Alma Ata. elevation: 2022m. remarks: Seed from 1968 planting came from local meadows. Wild. Seed.
- PI 538960 donor id: AJC358. origin: USSR. collected: August 14, 1988. collector id: AJC358. other id: 255. locality: Along Katun River, Yust-Sema, Altai Mountains. elevation: 914m. remarks: One head sampled. Wild. Seed.
- PI 538961 to 538965. Festuca rupicola Heuffel POACEAE

- PI 538961 donor id: AJC359. origin: USSR. collected: August 22, 1988. collector id: AJC359. other id: 164. locality: Over coal mine spoils, no grazing, 20km N of Karaganda. elevation: 290m. received as: Festuca sulcata. Wild. Seed.
- PI 538962 donor id: AJC360. origin: USSR. collected: August 21, 1988. collector id: AJC360. other id: 179. locality: Heavily grazed, 12km SE of Karaganda. elevation: 236m. remarks: Associated with grasses and Artemisia. received as: Festuca sulcata. Wild. Seed.
- PI 538963 donor id: AJC361. origin: USSR. collected: August 21, 1988. collector id: AJC361. other id: 190. locality: Dirt road, heavily grazed, 1km NW of Kurluz, Karaganda region. elevation: 259m. remarks: Mostly grass. received as: Festuca sulcata. Wild. Seed.

PI 538961 to 538965-continued

- PI 538964 donor id: AJC362. origin: USSR. origin institute:
 Institute of Cytology & Genetics, SIberian Branch of
 Academy of Science, Novosibirsk. collected: January 20,
 1989. collector id: AJC362. other id: 333. locality:
 Experimental farm, Cherga. received as: Festuca sulcata.
 Cultivated. Seed.
- PI 538965 donor id: AJC363. origin: USSR. origin institute:
 Institute of Cytology & Genetics, Siberian Branch of
 Academy of Science, Novosibirsk. collected: January 20,
 1989. collector id: AJC363. other id: 334. locality:
 Experimental farm, Cherga. received as: Festuca sulcata.
 Cultivated. Seed.
- PI 538966. Hedysarum gmelinii Ledeb. FABACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJC364. origin: USSR. collected: August 16, 1988. collector id: AJC364. other id: 245. locality: 10km E of Yubagon Pass, Altai region. elevation: 1372m. Wild. Seed.

PI 538967. Hedysarum sp. FABACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJC365. origin: USSR. collected: August 16, 1988. collector id: AJC365. other id: 431. locality: 5km W of Yubagon Village, Altai region, Siberia. elevation: 1372m. Wild. Seed.

PI 538968 to 538975. Koeleria gracilis Pers. POACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

PI 538968 donor id: AJC174. origin: USSR. collected: August 17, 1988. collector id: AJC174. other id: 073. locality: SW face, 4km NW of Cherga, Altai region. elevation: 1000m. remarks: Growing sympatric with 4X, fifteen to twenty plants sampled. Wild. Seed.

PI 538968 to 538975-continued

- PI 538969 donor id: AJC185. origin: USSR. collected: August 21, 1988. collector id: AJC185. other id: 189. locality: Grass/Artemisia, very localized, a little wet, along bank of dry river bed, 12km E of Karaganda. Wild. Seed.
- PI 538970 donor id: AJC186. origin: USSR. collected: August 22, 1988. collector id: AJC186. other id: 206. locality: Dirt road, heavily grazed, mostly grass, 1km N of Kurluz, Karaganda region. Wild. Seed.
- PI 538971 donor id: AJC187. origin: USSR. collected: August 22, 1988. collector id: AJC187. other id: 215. locality: Grass/Artemisia, near river bed, next to plowed strip meant for treeline, toward airport, 12km SE of Karaganda. Wild. Seed.
- PI 538972 donor id: AJC199. origin: USSR. collected: August 15, 1988. collector id: AJC199. other id: 371. locality: Across road from police radio traffic tower, 10 degree slope, 2-20m above road, about 10km N of Highway #52, Tuekta, Altai region. elevation: 4000m. remarks: Leaves strongly veined, 4-6cm long, 2-3mm wide. Culms 15-30cm tall. Panicles 3-6cm long. Wild. Seed.
- PI 538973 donor id: AJC200. origin: USSR. collected: August 15, 1988. collector id: AJC200. other id: 375. locality: Cemetery across road from village of Tuekta, Altai region. Wild. Seed.
- PI 538974 donor id: AJC206. origin: USSR. collected: August 16, 1988. collector id: AJC206. other id: 448. locality: Mostly forbs, ungrazed alpine taiga meadow, Yubagon Pass, Altai region. Wild. Seed.
- PI 538975 donor id: AJC368. origin: USSR. collected: August 22, 1988. collector id: AJC368. other id: 195. locality: Over coal mine spoils, no grazing, Karaganda-4, 20km N of Karaganda. elevation: 290m. Wild. Seed.
- PI 538976. Lolium perenne L. POACEAE Ryegrass

PI 538976-continued

donor id: AJC427. origin: USSR. origin institute: Institute of Cytology & Genetics, Siberian Branch of Academy of Science, Novosibirsk. collected: August 14, 1988. collector id: AJC427. other id: 271. locality: Experimental farm, Cherga. remarks: Originally from Leningrad. Seeded in 1984. Used for turf and forage. Cultivated. Seed.

PI 538977 to 538978. Lotus sp. FABACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

- PI 538977 donor id: AJC428. origin: USSR. collected: August 24, 1988. collector id: AJC428. other id: 046. locality: Sandy and dry, Altikarusu site, Khazak plain. remarks: 165mm precipitation. Wild. Seed.
- PI 538978 donor id: AJC429. origin: USSR. collected: August 22, 1988. collector id: AJC429. other id: 229. locality: Large, grazed field, Zak-2, 5km N of Zakharovka. elevation: 19m. Wild. Seed.
- PI 538979 to 538980. Lycopersicon esculentum Miller SOLANACEAE Tomato

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

- PI 538979 donor id: AJC430. origin: USSR. collected: August 17, 1988. collector id: AJC430. other id: 077. locality: Purchased in market, Cherga, Altai region. remarks: Fruit yellow. Grown locally. Cultivated. Seed.
- PI 538980 donor id: AJC431. origin: USSR. collected: August 17, 1988. collector id: AJC431. other id: 079. locality: Purchased in market, Cherga, Altai Mountains. remarks: Fruit red. Grown locally. Cultivated. Seed.
- PI 538981 to 538997. Medicago sativa subsp. falcata (L.) Arcang. FABACEAE Sickle alfalfa

PI 538981 to 538997-continued

- PI 538981 donor id: AJC432. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC432. other id: 122. locality: Obj River forest steppe, Altai region. received as: Medicago falcata. Wild. Seed.
- PI 538982 donor id: AJC434. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 38547. collected: 1972. collector id: AJC434. locality: Dikorastuscaja Kazakh. received as: Medicago falcata. Wild. Seed.
- PI 538983 donor id: AJC435. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 20254. collected: 1972. collector id: AJC435. locality: Dikorastuscaja, Ukrainian. received as: Medicago falcata. Wild. Seed.
- PI 538984 donor id: AJC436. origin: USSR. collected: August 24, 1988. collector id: AJC436. other id: 040. locality: Dry sandy area, Altikarusu site, Khazak plain. remarks: 165mm precipitation. received as: Medicago falcata. Wild. Seed.
- PI 538985 donor id: AJC437. origin: USSR. collected: August 25, 1988. collector id: AJC437. other id: 051. locality: Edge of road, no grazing, dry, on route from Aktubinsk to Orenburg, Martuk-1, 15km WNW of Martuk. received as: Medicago falcata. Wild. Seed.
- PI 538986 donor id: AJC438. origin: USSR. collected: August 17, 1988. collector id: AJC438. other id: 091. locality: 3km N of Cherga, Altai region, Siberia. elevation: 1000m. received as: Medicago falcata. Wild. Seed.
- PI 538987 donor id: AJC439. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC439. other id: 119. locality: Obj River, right bank forest steppe, Altai region. received as: Medicago falcata. Wild. Seed.
- PI 538988 donor id: AJC440. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC440. other id: 120. locality: Kulunda steppe. received as: Medicago falcata. Wild. Seed.
- PI 538989 donor id: AJC441. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC441. other id: 121. locality: Kulunda steppe. received as: Medicago falcata. Wild. Seed.

PI 538981 to 538997-continued

- PI 538990 donor id: AJC442. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC442. other id: 123. locality: Altai, low hills. received as: Medicago falcata. Wild. Seed.
- PI 538991 donor id: AJC443. origin: USSR. collected: August 26, 1988. collector id: AJC443. other id: 221. locality: Cemetery, Bolshevik State farm, Orenburg. received as: Medicago falcata. Wild. Seed.
- PI 538992 donor id: AJC444. origin: USSR. collected: August 17, 1988. collector id: AJC444. other id: 362. locality: 2km NW of Kamlak, Altai Mountains, Siberia. elevation: 671m. received as: Medicago falcata. Wild. Seed.
- PI 538993 donor id: AJC445. origin: USSR. collected: August 15, 1988. collector id: AJC445. other id: 379. locality: Cemetery, Tuekta, Altai region, Siberia. received as: Medicago falcata. Wild. Seed.
- PI 538994 donor id: AJC446. origin: USSR. collected: August 16, 1988. collector id: AJC446. other id: 437. locality: 5km W of Yubagon Village, Altai region, Siberia. elevation: 1372m. received as: Medicago falcata. Wild. Seed.
- PI 538995 donor id: AJC447. origin: USSR. collected: August 16, 1988. collector id: AJC447. other id: 459. locality: 5km W of Yubagon Pass, Altai Mountains, Siberia. received as: Medicago falcata. Wild. Seed.
- PI 538996 donor id: AJC448. origin: USSR. collected: August 14, 1988. collector id: AJC448. other id: 471. locality: Kamlak Pass, Altai region. elevation: 1006m. received as: Medicago falcata. Wild. Seed.
- PI 538997 donor id: AJC449. origin: USSR. collected: August 13, 1988. collector id: AJC449. other id: 242. locality: Gorno-Altysk Airport, Altai region. elevation: 579m. received as: Medicago falcata. Wild. Seed.
- PI 538998. Medicago hybrida (Pourret) Trautv. FABACEAE

PI 538998-continued

donor id: AJC450. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC450. other id: 124. Wild. Seed.

PI 538999. Medicago minima (L.) Bartal. FABACEAE Little burclover

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJC451. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 34578. collected: 1976. collector id: AJC451. locality: SW face, 4km NW of Cherga, Altai region. remarks: Appears like Lathyrus. received as: M. meyru. Wild. Seed.

PI 539000. Medicago polymorpha var. vulgaris (Benth.) Shinn., nom. illeg. FABACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJC433. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 21591. collected: 1978. collector id: AJC433. locality: Dikorastuscaja, Armenian SSR. received as: Medicago denticulata. Wild. Seed.

PI 539001 to 539003. Medicago sativa L. FABACEAE Alfalfa

- PI 539001 donor id: AJC452. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 38408. collected: 1978. collector id: AJC452. locality: L. Semirecenskaja mestnaja Kazakh. Wild. Seed.
- PI 539002 donor id: AJC453. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 30706. collected: 1976. collector id: AJC453. locality: Dikorastuscaja Tajik. Wild. Seed.

- PI 539001 to 539003-continued
 - PI 539003 donor id: AJC454. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 35643. collected: 1978. collector id: AJC454. locality: L. Krasnovadopadskaja 8 Kazakh. Wild. Seed.
- PI 539004 to 539007. Medicago sativa nsubsp. varia (Martyn) Arcang. FABACEAE

- PI 539004 donor id: AJC455. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 35731. collected: 1980. collector id: AJC455. locality: Dikorastuscaja Stavropol Territory. received as: Medicago hemicycla. Wild. Seed.
- PI 539005 donor id: AJC457. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 37219. collected: 1976. collector id: AJC457. locality: Vass. Dikorastuscaja Kazakh. received as: Medicago transchanica. Wild. Seed.
- PI 539006 donor id: AJC459. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 33557. collected: 1976. collector id: AJC459. locality: Sumn. Dikorastuscaja Kazakh. received as: Medicago trautvetteri. Wild. Seed.
- PI 539007 donor id: AJC460. origin: USSR. collected: August 24, 1988. collector id: AJC460. other id: 021. locality: Dry, grass/forb, 30km SE of Shubar-Kuduk, Aktyubinsk region. received as: Medicago varia. Wild. Seed.
- PI 539008 to 539009. Medicago sp. FABACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

PI 539008 donor id: AJC456. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 34580. collected: 1967. collector id: AJC456. locality: Dikorastuscaja Turkmen. received as: Medicago sinscaja. Wild. Seed.

- PI 539008 to 539009-continued
 - PI 539009 donor id: AJC458. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. origin institute id: VIR 4803. collected: 1969. collector id: AJC458. locality: Dikorastuscaja Crimean region. received as: Medicago torulosus. Wild. Seed.
- PI 539010 to 539016. Melilotus albus Medikus FABACEAE White sweetclover

- PI 539010 donor id: AJC461. origin: USSR. collected: August 24, 1988. collector id: AJC461. other id: 009. locality: Silt loam, grass, forb, legume, middle of Khazak plain, Uil River. Wild. Seed.
- PI 539011 donor id: AJC462. origin: USSR. collected: August 24, 1988. collector id: AJC462. other id: 048. locality: Sandy and dry in Khazak plain, Altikarasu. remarks: 165mm precipitation. Wild. Seed.
- PI 539012 donor id: AJC463. origin: USSR. collected: August 26, 1988. collector id: AJC463. other id: 168. locality: Sandy, ungrazed area, Lenin State Farm, 6km E of Kruchkovka. Wild. Seed.
- PI 539013 donor id: AJC464. origin: USSR. collected: August 13, 1988. collector id: AJC464. other id: 237. locality: Gorno-Altysk Airport, Altai region. elevation: 578m. Wild. Seed.
- PI 539014 donor id: AJC465. origin: USSR. collected: August 17, 1988. collector id: AJC465. other id: 422. locality: Mixed grass/forb community, S facing slope, 5km S of Cherga, Altai Mountains, Siberia. elevation: 724m. Wild. Seed.
- PI 539015 donor id: AJC466. origin: USSR. collected: August 17, 1988. collector id: AJC466. other id: 423. locality: 2km NW of Kamlak, Altai Mountains, Siberia. elevation: 669m. Wild. Seed.
- PI 539016 donor id: AJC467. origin: USSR. collected: August 17, 1988. collector id: AJC467. other id: 439. locality: 2km NW of Kamlak, Altai Mountains, Siberia. elevation: 669m. Wild. Seed.

- PI 539017 to 539022. Melilotus officinalis Lam. FABACEAE Yellow sweetclover
 - Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.
 - PI 539017 donor id: AJC468. origin: USSR. collected: August 22, 1988. collector id: AJC468. other id: 167. locality:
 Over coal mine spoils, no grazing, Karaganda-4, 20km N of Karaganda. elevation: 290m. Wild. Seed.
 - PI 539018 donor id: AJC469. origin: USSR. collected: August 15, 1988. collector id: AJC469. other id: 351. locality: Diverse grass, legume meadow, N facing slope, 10km N Tuekta, Altai region, Siberia. elevation: 1219m. Wild. Seed.
 - PI 539019 donor id: AJC470. origin: USSR. origin institute:
 Institute of Cytology & Genetics, Siberian Branch of
 Academy of Science, Novosibirsk. collected: August 15,
 1988. collector id: AJC470. other id: 352. locality:
 Experimental farm, Cherga, Altai region. Cultivated.
 Seed.
 - PI 539020 donor id: AJC471. origin: USSR. collected: August 17, 1988. collector id: AJC471. other id: 386. locality: 2km NW of Kamlak, Altai region, Siberia. elevation: 669m. Wild. Seed.
 - PI 539021 donor id: AJC472. origin: USSR. collected: August 17, 1988. collector id: AJC472. other id: 391. locality: 2km NW of Kamlak, Altai Mountains, Siberia. elevation: 669m. Wild. Seed.
 - PI 539022 donor id: AJC473. origin: USSR. collected: August 17, 1988. collector id: AJC473. other id: 400. locality: Mixed grass/forb community, valley bottom, 8km S of Cherga, Altai Mountains, Siberia. elevation: 853m. Wild. Seed.
- PI 539023 to 539025. Onobrychis arenaria subsp. sibirica (Sirj.) P. Ball FABACEAE
 - Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.
 - PI 539023 donor id: AJC476. origin: USSR. collected: August 15, 1988. collector id: AJC476. other id: 378. locality: Grass-legume meadow on hillside, N facing slope, 10km N Tuekta, Altai region, Siberia. elevation: 1219m. received as: Onobrychis sibiricus. Wild. Seed.

- PI 539023 to 539025-continued
 - PI 539024 donor id: AJC477. origin: USSR. collected: August 15, 1988. collector id: AJC477. other id: 380. locality: Mixed grass/forb subalpine meadow, near Topuchee Pass, Altai Mountains, Siberia. received as: Onobrychis sibiricus. Wild. Seed.
 - PI 539025 donor id: AJC478. origin: USSR. collected: August 17, 1988. collector id: AJC478. other id: 452. locality: Mixed grass/forb meadow in valley bottom, 5km S of Cherga, Altai Mountains, Siberia. elevation: 722m. received as: Onobrychis sibiricus. Wild. Seed.
- PI 539026 to 539027. Onobrychis sp. FABACEAE

- PI 539026 donor id: AJC475. origin: USSR. collected: August 13, 1988. collector id: AJC475. other id: 435. locality: Open sandy area, hayfield, Cherepanovsky, Novosibirsk region. elevation: 122m. Wild. Seed.
- PI 539027 donor id: AJC479. origin: USSR. collected: August 17, 1988. collector id: AJC479. other id: 061. locality: 3km N of Cherga, Altai region, Siberia. Wild. Seed.
- PI 539028. Panicum miliaceum L. POACEAE Proso millet

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJC480. origin: USSR. collected: August 22, 1988. collector id: AJC480. other id: 219. locality: Roadside, no grazing, Aktube-2, 18km NW of Molodetskoye. elevation: 183m. Wild. Seed.

PI 539029 to 539030. Phalaris arundinacea L. POACEAE Reed canarygrass

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

PI 539029 donor id: AJC481. origin: USSR. origin institute:
Institute of Cytology & Genetics, Siberian Branch of
Academy of Science, Novosibirsk. collected: January 20,
1989. collector id: AJC481. other id: 337. locality:
Experimental farm, Cherga. Cultivated. Seed.

- PI 539029 to 539030-continued
 - PI 539030 donor id: AJC482. origin: USSR. origin institute:
 Institute of Cytology & Genetics, Siberian Branch of
 Academy of Science, Novosibirsk. collected: January 20,
 1989. collector id: AJC482. other id: 338. locality:
 Experimental farm, Cherga. Cultivated. Seed.
- PI 539031. Phleum phleoides (L.) Karsten POACEAE

donor id: AJC483. origin: USSR. collected: August 15, 1988. collector id: AJC483. other id: 263. locality: Grass-legume meadow, N face, Tuekta, Altai Mountains. elevation: 1216m. Wild. Seed.

PI 539032. Phleum sp. POACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJC484. origin: USSR. collected: August 17, 1988. collector id: AJC484. other id: 064. locality: 3km N of Cherga, S facing slope, Altai region, Siberia. Wild. Seed.

PI 539033 to 539039. Phleum pratense L. POACEAE Timothy

- PI 539033 donor id: AJC485. origin: USSR. collected: August 18, 1988. collector id: AJC485. other id: 249. locality: Sparse stand, heavily grazed area, 4km N of Gorno-Altysk, 4km N along river bottom, Altai region, Siberia. elevation: 472m. Wild. Seed.
- PI 539034 donor id: AJC486. origin: USSR. collected: August 17, 1988. collector id: AJC486. other id: 250. locality: 2km NW of Kamlak, Altai Mountains, Siberia. elevation: 669m. Wild. Seed.
- PI 539035 donor id: AJC487. origin: USSR. collected: August 17, 1988. collector id: AJC487. other id: 260. locality: 2km NW of Kamlak, Altai Mountains, Siberia. elevation: 669m. Wild. Seed.

PI 539033 to 539039-continued

- PI 539036 donor id: AJC488. origin: USSR. collected: August 14, 1988. collector id: AJC488. other id: 265. locality: Hillside, 1.6km from Cherga, Altai region. Wild. Seed.
- PI 539037 donor id: AJC489. origin: USSR. collected: August 18, 1988. collector id: AJC489. other id: 269. locality: Along river bottom, 4km N of Gorno-Altysk, Altai Mountains, Siberia. elevation: 472m. Wild. Seed.
- PI 539038 donor id: AJC490. origin: USSR. collected: August 16, 1988. collector id: AJC490. other id: 365. locality: 5km W of Yubagon Village, Altai Mountains, Siberia. elevation: 1372m. Wild. Seed.
- PI 539039 donor id: AJC491. origin: USSR. collected: August 17, 1988. collector id: AJC491. other id: 390. locality: Mixed grass/forb meadow in valley bottom, 5km S of Cherga, Altai Mountains, Siberia. elevation: 722m. Wild. Seed.
- PI 539040 to 539062. Poa pratensis L. POACEAE Kentucky bluegrass

- PI 539040 donor id: AJC502. origin: USSR. collected: August 17, 1988. collector id: AJC502. other id: 070. locality: SW face, 4km NW of Cherga, Altai Mountains. elevation: 1000m. Wild. Seed.
- PI 539041 donor id: AJC503. origin: USSR. collected: August 26, 1988. collector id: AJC503. other id: 076. locality: Mixed grass/forbs, ungrazed and uncut alongside road and hay fields, Gregarin State Farm, 15km SE of Karavanniy, Orenburg region. Wild. Seed.
- PI 539042 donor id: AJC504. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC504. other id: 098. other id: K-30737. locality: Krasnoyarsk region. Wild. Seed.
- PI 539043 donor id: AJC505. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC505. other id: 099. other id: K-31173. locality: Sverdlovsk region. Wild. Seed.
- PI 539044 donor id: AJC506. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC506. other id: 100. other id: K-30395. locality: Kurgan region. Wild. Seed.

- PI 539045 donor id: AJC507. origin: USSR. origin institute: VIR, 44 Herzen Street, Leningrad. collected: January 20, 1989. collector id: AJC507. other id: 101. other id: K-31175. locality: Sverdlovsk region. Wild. Seed.
- PI 539046 donor id: AJC508. origin: USSR. collected: August 20, 1988. collector id: AJC508. other id: 161. locality: Mixed grass/forbs, top of dam, Medeo Dam site, near Alma Ata. elevation: 2027m. remarks: Seed for 1968 planting came from local meadows. Wild. Seed.
- PI 539047 donor id: AJC509. origin: USSR. collected: August 26, 1988. collector id: AJC509. other id: 181. locality: Mixed grass/forbs, ungrazed and uncut area along roadside and hay fields, Gregarin State Farm, 15km SE of Karavanniy, Orenburg region. Wild. Seed.
- PI 539048 donor id: AJC510. origin: USSR. collected: August 26, 1988. collector id: AJC510. other id: 182. locality: Shelter belt of trees and grass, understory of wind shelter, Ivanovka-1, Orenburg region, 3km E of Ivanovka. Wild. Seed.
- PI 539049 donor id: AJC511. origin: USSR. collected: August 22, 1988. collector id: AJC511. other id: 183. locality: Large, grazed field, Karaganda region, 5km N of Zakharovka. Wild. Seed.
- PI 539050 donor id: AJC513. origin: USSR. collected: August 17, 1988. collector id: AJC513. other id: 302. locality: Old abandoned bridge, near Ulus, Cherga Village, Altai Mountains, Siberia. elevation: 900m. Wild. Seed.
- PI 539051 donor id: AJC514. origin: USSR. collected: August 18, 1988. collector id: AJC514. other id: 303. locality: Along river bottom, 4km N of Gorno-Altysk, Altai region, Siberia. elevation: 472m. Wild. Seed.
- PI 539052 donor id: AJC515. origin: USSR. collected: August 15, 1988. collector id: AJC515. other id: 304. locality: Grass-legume meadow, N facing slope, 10km N Tuekta, Altai region. elevation: 1216m. Wild. Seed.
- PI 539053 donor id: AJC516. origin: USSR. collected: August 14, 1988. collector id: AJC516. other id: 305. locality: Along Sema River, roadside, Cherga, Altai Mountains. remarks: Forty to fifty plants sampled. Wild. Seed.
- PI 539054 donor id: AJC517. origin: USSR. collected: August 15, 1988. collector id: AJC517. other id: 306. locality: Ungrazed, near road, alpine meadow of mixed grass/forbs, Topuchee, Altai Mountains, Siberia. Wild. Seed.

PI 539040 to 539062-continued

- PI 539055 donor id: AJC518. origin: USSR. collected: August 14, 1988. collector id: AJC518. other id: 307. locality: Wooded mixed grass, birch, Yust-Sema, Altai Mountains. remarks: Thirty to forty plants sampled. Wild. Seed.
- PI 539056 donor id: AJC519. origin: USSR. collected: August 15, 1988. collector id: AJC519. other id: 308. locality: Cemetery, Tuekta, Altai Mountains, Siberia. Wild. Seed.
- PI 539057 donor id: AJC520. origin: USSR. collected: August 14, 1988. collector id: AJC520. other id: 311. locality: Along Katun River, Yust-Sema, Altai Mountains, Siberia. elevation: 914m. Wild. Seed.
- PI 539058 donor id: AJC521. origin: USSR. collected: August 16, 1988. collector id: AJC521. other id: 312. locality: 10km E of Yubagon Pass, Altai Mountains. Wild. Seed.
- PI 539059 donor id: AJC522. origin: USSR. collected: August 15, 1988. collector id: AJC522. other id: 313. locality: Heavily grazed meadows, 5km E of Yubagon Pass, Altai region, Siberia. elevation: 1372m. Wild. Seed.
- PI 539060 donor id: AJC523. origin: USSR. collected: August 15, 1988. collector id: AJC523. other id: 359. locality: 5km E of Yubagon Pass, Altai region, Siberia. elevation: 1372m. Wild. Seed.
- PI 539061 donor id: AJC524. origin: USSR. collected: August 17, 1988. collector id: AJC524. other id: 360. locality: Near Ulus, Cherga Village, Altai region, Siberia. elevation: 900m. Wild. Seed.
- PI 539062 donor id: AJC525. origin: USSR. collected: August 16, 1988. collector id: AJC525. other id: 460. locality: Mixed grass/forbs, subalpine meadow, hillside, half way up slope, Topuchee Pass, Altai Mountains. Wild. Seed.

PI 539063. Potentilla sp. ROSACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJC526. origin: USSR. collected: August 16,
1988. collector id: AJC526. other id: 261. locality:
5km W of Yubagon Village, Altai region, Siberia.
elevation: 1372m. Wild. Seed.

PI 539064. Rosa spinosissima L. ROSACEAE Burnet rose

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJC542. origin: USSR. collected: August 22, 1988. collector id: AJC542. other id: 175. locality: Karaganda, Kazakhstan. Wild. Seed.

PI 539065 to 539066. Sorghum halepense (L.) Pers. POACEAE Johnson grass

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

PI 539065 donor id: AJC543. origin: USSR. cultivar: ZHURONSKIYA. collected: August 23, 1988. collector id: AJC543. other id: 017. locality: Alma Ata. Cultivar. Seed.

PI 539066 donor id: AJC544. origin: USSR. collected: August 26, 1988. collector id: AJC544. other id: 174. locality: Shelter belt of trees and grass, Orenburg region, 3km E of Ivanovka. Wild. Seed.

PI 539067. Stellaria graminea L. CARYOPHYLLACEAE Little starwart

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJC545. origin: USSR. collected: August 22, 1988. collector id: AJC545. other id: 185. locality: Over coal mine spoils, no grazing, 20km N of Karaganda. elevation: 290m. Wild. Seed.

PI 539068 to 539075. Stipa capillata L. POACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

PI 539068 donor id: AJC547. origin: USSR. collected: August 22, 1988. collector id: AJC547. other id: 184. locality: Mixed grass/forbs, ungrazed, just SE of Molodetskoye, 90km NW of Karaganda along highway, Aktyubinsk region. elevation: 175m. Wild. Seed.

PI 539068 to 539075-continued

- PI 539069 donor id: AJC548. origin: USSR. collected: August 23, 1988. collector id: AJC548. other id: 053. locality: Very dry, highly eroded, heavily grazed, roadside, gypsum areas, Aktyubinsk area. Wild. Seed.
- PI 539070 donor id: AJC549. origin: USSR. collected: August 22, 1988. collector id: AJC549. other id: 186. locality: Over coal mine spoils, no grazing, 20km N of Karaganda. elevation: 290m. Wild. Seed.
- PI 539071 donor id: AJC550. origin: USSR. collected: August 26, 1988. collector id: AJC550. other id: 198. locality: Shelter belt of trees and grass, 3km E of Ivanovka, Orenburg region. Wild. Seed.
- PI 539072 donor id: AJC551. origin: USSR. collected: August 26, 1988. collector id: AJC551. other id: 214. locality: Mixed grass/forbs, ungrazed and uncut area alongside road and hay fields, Gregarin State Farm, 15km SE of Karavanniy, Orenburg region. remarks: 280mm precipitation. Wild. Seed.
- PI 539073 donor id: AJC552. origin: USSR. collected: August 26, 1988. collector id: AJC552. other id: 220. locality: Sandy, ungrazed area, Lenin State Farm, 6km E of Kruchkovka. Wild. Seed.
- PI 539074 donor id: AJC553. origin: USSR. collected: August 15, 1988. collector id: AJC553. other id: 095. locality: Last campsite, hillside, Tenga, Altai region, Siberia. Wild. Seed.
- PI 539075 donor id: AJC554. origin: USSR. collected: August 26, 1988. collector id: AJC554. other id: 176. locality: Cemetery, Bolshevik State Farm, near Orenburg. Wild. Seed.
- PI 539076 to 539081. Stipa sibirica (L.) Lam. POACEAE Needlegrass
 - Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.
 - PI 5390 donor id: AJC556. origin: USSR. collected: August 15, 1988. collector id: AJC556. other id: 257. locality: Kamlak, near Topuchee Pass, Altai Mountains, Siberia. Wild. Seed.

PI 539076 to 539081-continued

- PI 539077 donor id: AJC557. origin: USSR. collected: August 15, 1988. collector id: AJC557. other id: 258. locality: Rocky hillside, Farm Tinginskiy, Altai Mountains, Siberia. Wild. Seed.
- PI 539078 donor id: AJC558. origin: USSR. collected: August 17, 1988. collector id: AJC558. other id: 330. locality: Mixed grass/forb, 5km S of Cherga, Altai Mountains, Siberia. elevation: 724m. Wild. Seed.
- PI 539079 donor id: AJC559. origin: USSR. collected: August 16, 1988. collector id: AJC559. other id: 420. locality: Heavily grazed area, Elo, Altai region. elevation: 1273m. Wild. Seed.
- PI 539080 donor id: AJC560. origin: USSR. collected: August 17, 1988. collector id: AJC560. other id: 430. locality: 2km NW of Kamlak, Altai Mountains, Siberia. elevation: 669m. Wild. Seed.
- PI 539081 donor id: AJC561. origin: USSR. collected: August 14, 1988. collector id: AJC561. other id: 246. locality: Natural stand, rocky hillside, Cherga, Altai region. Wild. Seed.

PI 539082 to 539086. Stipa sp. POACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

- PI 539082 donor id: AJC371. origin: USSR. collected: August 23, 1988. collector id: AJC371. other id: 032. locality: Along elevated dirt road, grazed, dryland area about 10km SE of power transformer station, Saraldjy State Farm-3, Kazakhstan. received as: Lasiagrostis sp.. Wild. Seed.
- PI 539083 donor id: AJC372. origin: USSR. collected: August 21, 1988. collector id: AJC372. other id: 192. locality: Heavily grazed, Karaganda-3, 12km E of Karaganda. elevation: 775m. remarks: Associated with grasses and Artemisia. received as: Lasiagrostis sp.. Wild. Seed.
- PI 539084 donor id: AJC546. origin: USSR. collected: August 24, 1988. collector id: AJC546. other id: 024. locality: Dry, grass/forb, Shuku-2, 30km SE of Shubar-Kuduk. Wild. Seed.

PI 539082 to 539086-continued

- PI 539085 donor id: AJC555. origin: USSR. collected: August 15, 1988. collector id: AJC555. other id: 256. locality: Rocky, grazed hillside, fields, Farm Tinginskiy, Altai Mountains, Siberia. received as: Stipa ioana. Wild. Seed.
- PI 539086 donor id: AJC562. origin: USSR. collected: August 21, 1988. collector id: AJC562. other id: 188. locality: Dirt road, heavily grazed, mostly grass, 1km NW of Kurluz, Karaganda region. Wild. Seed.
- PI 539087 to 539089. Trifolium lupinaster L. FABACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

- PI 539087 donor id: AJC564. origin: USSR. collected: August 15, 1988. collector id: AJC564. other id: 238. locality: Near Topuchee, Altai Mountains, Siberia. Wild. Seed.
- PI 539088 donor id: AJC565. origin: USSR. collected: August 17, 1988. collector id: AJC565. other id: 240. locality: 2km NW of Kamlak, Altai Mountains, Siberia. Wild. Seed.
- PI 539089 donor id: AJC566. origin: USSR. collected: August 17, 1988. collector id: AJC566. other id: 243. locality: Shallow rocky soil, S facing slope, mixed grass/forb, 5km S of Cherga, Altai Mountains, Siberia. elevation: 722m. Wild. Seed.
- PI 539090 to 539098. Trifolium pratense L. FABACEAE Red clover

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

- PI 539090 donor id: AJC567. origin: USSR. collected: August 17, 1988. collector id: AJC567. other id: 066. locality: S facing slope, 3km N of Cherga, Altai region, Siberia. elevation: 1000m. remarks: Associated species: Dactylis, Phleum, Festuca. Wild. Seed.
- PI 539091 donor id: AJC568. origin: USSR. collected: August 20, 1988. collector id: AJC568. other id: 170. locality: Mixed grass/forb, top of dam, Medeo Dam site, near Alma Ata. elevation: 2027m. remarks: Seed from 1968 planting came from local meadows. Wild. Seed.

PI 539090 to 539098-continued

- PI 539092 donor id: AJC569. origin: USSR. collected: August 17, 1988. collector id: AJC569. other id: 170. locality: 2km NW of Kamlak, Altai Mountains, Siberia. elevation: 669m. Wild. Seed.
- PI 539093 donor id: AJC570. origin: USSR. collected: August 17, 1988. collector id: AJC570. other id: 284. locality: Mixed grass/forb, meadow in valley bottom, 5km S of Cherga, Altai Mountains, Siberia. elevation: 724m. Wild. Seed.
- PI 539094 donor id: AJC571. origin: USSR. collected: August 18, 1988. collector id: AJC571. other id: 285. locality: Along river bottom, heavily grazed area, 4km N of Gorno-Altysk, Altai Mountains, Siberia. elevation: 472m. Wild. Seed.
- PI 539095 donor id: AJC572. origin: USSR. collected: August 15, 1988. collector id: AJC572. other id: 286. locality: Diverse grass-legume meadow, N face, Tuekta, Altai Mountains, Siberia. elevation: 1216m. Wild. Seed.
- PI 539096 donor id: AJC573. origin: USSR. collected: August 13, 1988. collector id: AJC573. other id: 287. locality: Gorno-Altysk Airport, Altai Mountains, Siberia. elevation: 579m. Wild. Seed.
- PI 539097 donor id: AJC574. origin: USSR. collected: August 16, 1988. collector id: AJC574. other id: 288. locality: 10km E of Yubagon Pass, Altai region, Siberia. elevation: 1509m. Wild. Seed.
- PI 539098 donor id: AJC575. origin: USSR. collected: August 17, 1988. collector id: AJC575. other id: 421. locality: Top of Kukuya Pass, 30km W of Cherga, Altai region, Siberia. elevation: 1200m. Wild. Seed.
- PI 539099 to 539101. Trifolium repens L. FABACEAE White clover

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

PI 539099 donor id: AJC576. origin: USSR. collected: August 20, 1988. collector id: AJC576. other id: 160. locality: Mixed grass/forb, top of dam, Medeo Dam site, near Alma Ata. elevation: 2027m. remarks: Seed from 1968 planting came from local meadows. Wild. Seed.

PI 539099 to 539101-continued

PI 539100 donor id: AJC577. origin: USSR. collected: August 13, 1988. collector id: AJC577. other id: 434. locality: Gorno-Altysk Airport, Altai Mountains, Siberia. elevation: 579m. Wild. Seed.

PI 539101 donor id: AJC578. origin: USSR. collected: August 15, 1988. collector id: AJC578. other id: 457. locality: N facing slope, diverse grass-legume meadow, 10km N Tuekta, Altai region, Siberia. elevation: 1219m. Wild. Seed.

PI 539102. Trifolium sp. FABACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJC579. origin: USSR. collected: August 17,
1988. collector id: AJC579. other id: 071. locality:
SW face, 4km NW of Cherga, Altai region. elevation:
1000m. remarks: Appears like Lathyrus. Wild. Seed.

PI 539103. Hordeum vulgare L. POACEAE Barley

Donated by: Colorado State University, Ft. Collins, Colorado, United States. Received January 30, 1990.

origin: United States. cultivar: COAST. pedigree:
Reselection with less variation then the original Coast.
other id: CIho 690. remarks: 6-rowed, rough-awned type.
Plant maturity midseason. Plant height short to midtall.
Basel leaf sheaths without pubescence and green. Upper
leaf sheaths waxy, yellow at maturity. Auricles white.
Stem yellow at maturity. Kernels blue. Seed weight 4.0 to
4.5gm per 100. Hulls slightly wrinkled or semiwrinkled.
Straw moderately weak, Uniform density of spike, kernel
color, heading date and plant. Spring Annual. Cultivar.
Seed.

PI 539104. Hordeum vulgare L. POACEAE Barley

Donated by: Minnesota Agricultural Exp. Sta., St. Paul, Minnesota, United States. Received January 30, 1990.

origin: United States. cultivar: ALGERIAN. other id: CIho 1179. Annual. Cultivar. Seed.

PI 539105. Hordeum vulgare L. POACEAE Barley

Donated by: Foote, W.H., Oregon State University, Department of Agronomy, Corvallis, Oregon, United States. Received January 30, 1990.

origin: Ethiopia. cultivar: BENTON. pedigree: Plant introduction listed as belonging to the Abyssinian (Ethiopia) group of barleys. other id: CIho 1227. other id: CV-82. source: Crop Sci. 6(1):93 1966. group: CSR-BARLEY. remarks: 6-rowed, rough-awned, hulled type. Plant height midtall. Kernals large and white with long rachilla hairs. Lateral kernels overlay. Plants light green before maturity. Straw weak to moderately stiff and subject to lodging under high fertility conditons. Fails to set seed as a female parent following normal emasculation (floral sensitivity). Resistant to barley yellow dwarf virus strains found in. Spring Annual. Cultivar. Seed.

PI 539106. Hordeum vulgare L. POACEAE Barley

Donated by: Bockelman, H.E., USDA-ARS, Small Grains Collection, P.O. Box 307, Aberdeen, Idaho, United States. Received January 30, 1990.

origin: United States. cultivar: ABYSSINIAN. other id: CIho 1237. Annual. Cultivar. Seed.

PI 539107. Hordeum vulgare L. POACEAE Barley

Donated by: North Dakota Agricultural Exp. Sta., North Dakota State University, Fargo, North Dakota, United States. Received January 30, 1990.

origin: United States. cultivar: MANCHURIA. pedigree: Selection from Manchury Minnesota No. 6 in 1901. other id: CIho 2947. other id: N. Dak. 2121. remarks: Rachilla short haired. Kernels blue and midlong. Straw moderately stiff. Annual. Cultivar. Seed.

PI 539108. Hordeum vulgare L. POACEAE Barley

Donated by: University of California, Davis, California, United States. Received January 30, 1990.

PI 539108-continued

origin: United States. cultivar: ATLAS. pedigree: Pure line selection from Coast. other id: CIho 4118. remarks: 6-rowed, rough awned type. Plant height short. Maturity early. Straw stiff. Kernels blue. Seed weight 4.3 to 4.9gm per 100. Resistant to barley stripe (Pyrenophora graminis) races in Wisconsin but susceptible to those found in California. Spring Annual. Cultivar. Seed.

PI 539109. Hordeum vulgare L. POACEAE Barley

Donated by: Lambert, J.W., University Minnesota, Dep. of Agronomy and Plant Genetics, St. Paul, Minnesota, United States. Received January 30, 1990.

origin: United States. cultivar: PEATLAND. pedigree: Pure line selection from an introduction from Switzerland. other id: CIho 5267. other id: CV-34. source: Agron. J. 50(11):708 1958. group: CSR-BARLEY. remarks: 6-rowed, rough-awned feed type with colorless aleurone. Plant height medium tall. Maturity medium. Straw strength good. Resistance to stem rust (Puccinia graminis). Moderate resistance to spot blotch (Helminthosporium sativum), net blotch (Pyrenophora teres), loose smut (Ustilago nuda), powdery mildew (Erysiphe graminis) and scab (Fusarium graminearum). Spring Annual. Cultivar. Seed.

PI 539110. Hordeum vulgare L. POACEAE Barley

Donated by: Harlan, H.V., Idaho Agricultural Exp. Sta., Division of Cereal Crops and Diseases, Aberdeen, Idaho, United States. remarks: Released in cooperation with the California Agricultural Experiment Station in 1943. Received January 30, 1990.

origin: United States. cultivar: ROJO. pedigree: Selection from a composite cross I, CIho 4116. other id: CIho 5401. remarks: 6-rowed, smooth-awned type. Maturity early. Kernels white, midlong to long. Hulla slightly wrinkled to semiwrinkled. Straw moderately stiff. Seed weight 4.1 to 5.0gm per 100. Spring Annual. Cultivar. Seed.

PI 539111. Hordeum vulgare L. POACEAE Barley

Donated by: Harlan, H.V., Montana Agricultural Experiment Station, Boseman, Montana, United States. remarks: Released in cooperation by the Bureau of Plant Industry and the Montana Agricultural Experiment Station. Received January 30, 1990.

PI 539111-continued

origin: United States. cultivar: COMPANA. pedigree: Selection from a composite cross I, CIho 4116. other id: CIho 5438. other id: CV-10. source: J. Am. Soc. Agron. 33(3):252 1941. group: CSR-BARLEY. remarks: 2-rowed, hulled, semi-smooth type. Plants short and erect. Yield high. Maturity early. Seed weight 4.0 to 5.9gm per 100. Resistance to drought and grasshopper attack. Spring Annual. Cultivar. Seed.

PI 539112. Hordeum vulgare L. POACEAE Barley

Donated by: Suneson, C.A., University of California, Davis, California, United States. remarks: Released by the Oregon Agricultural Experiment Station, Moro in 1949. Received January 30, 1990.

origin: United States. cultivar: SPRAY. pedigree: Selection from a composite cross I, CIho 4116. other id: CIho 5445. other id: CV-29. source: Agron. J. 50(11):708 1958. group: CSR-BARLEY. remarks: 6-rowed, hooded, awnless type with blue aleurone. Maturity medium. Plant height medium. Stems fine and leafy. Superior hay qualities. Yield range: 1666 to 2338kg per hectare. depending on location. Annual. Cultivar. Seed.

PI 539113. Hordeum vulgare L. POACEAE Barley

Donated by: Parker, J.H., Kansas State University, Manhattan, Kansas, United States. Received January 30, 1990.

origin: United States. cultivar: CEBADA CAPA. other id: CIho 6193. Annual. Cultivar. Seed.

PI 539114. Hordeum vulgare L. POACEAE Barley

Donated by: Hill, D.D., Oregon State College, (Oregon State University), Corvallis, Oregon, United States. remarks: Distributed in 1939. Received January 30, 1990.

origin: United States. cultivar: SANTIAM. pedigree: Selection fron composite cross III, CIho 5530. other id: CIho 6367. other id: CV-15. source: J. Am. Soc. Agron. 35(3):240 1943. group: CSR-BARLEY. remarks: 6-rowed, rough awned type with white hulled kernels and long haired rachilla. Early growth semiprostrate. Maturity midseason to late. Seed weight 3.5 to 4.1gm per 100. Hulls slightly wrinkled to semiwrinkled. Yield average 2924kg per hectare. Winter Annual. Cultivar. Seed.

PI 539115. Hordeum vulgare L. POACEAE Barley

Donated by: Middleton, G.K., North Carolina Agricultural Exp. Sta., North Carolina State University, Raleigh, North Carolina, United States. remarks: Released in 1939. Received January 30, 1990.

origin: United States. cultivar: DAVIDSON. pedigree: Hybrid selection from Composte Cross II, CIho 5461. other id: CIho 6373. remarks: 6-rowed rough awned type. Rachilla short haired. Kernels blue. Seed weight 3.7 to 4.3gm per 100. Hulls slightly wrinkled to semiwrinkled. Moderately winter-hardy. Straw. stiff. Resistant to smut (Ustilago ssp.). Winter Annual. Cultivar. Seed.

PI 539116. Hordeum vulgare L. POACEAE Barley

Donated by: Atkins, I.M., USDA, Texas Agricultural Exp. Sta., College Station, Texas, United States. remarks: Developed cooperatively by the Texas Agricultural Experiment Station and United States Department of Agriculture and released in 1941. Received January 30, 1990.

origin: United States. cultivar: TEXAN. pedigree:
Hybrid selection from Composite Cross III, CIho 5530.
other id: CIho 6499. other id: CV-14. source: J. Am
Soc. Agron. 34(3):281 1942. group: CSR-BARLEY.
remarks: 6-rowed smooth awned type. Rachilla
short-haired, occasionally abortive. Kernels blue
mid-long to long. Seed weight 4.0 to 4.2gm per 100. Hulls
semi-wrinkled to wrinkled. Limited winterhardiness. Straw
moderately weak to weak. Moderately resistant to net
blotch (Pyrenophora teres). Some resistance to powdery
mildew (Erysiphe graminis). Winter Annual. Cultivar.
Seed.

PI 539117. Hordeum vulgare L. POACEAE Barley

Donated by: Jensen, N.F., Cornell Univ. Agric. Experiment Sta., Ithaca, New York, United States. remarks: Distributed in 1941. Received January 30, 1990.

PI 539117-continued

origin: United States. cultivar: WONG. pedigree:
Selection from Orel/Unnamed Chinese variety from Szechuan
Province. other id: CIho 6728. other id: CV-59.
source: Crop Sci. 4(2):238 1964. group: CSR-BARLEY.
other id: Nanking 2A. remarks: 6-rowed feed type with
moderately good winter hardiness, high yield,
outstandingly strong straw and resistance to powdery
mildew (Erysiphe graminis). Plants midtall. Spikes erect
and dense. Kernels light blue. Spikes awnless or awnleted
with occasional full length awns on the 2 dominant rows
of kernels. Susceptible to scald (Rhynosporium secalis)
Yield 2714kg per hectare. Winter Annual. Cultivar.
Seed.

PI 539118. Hordeum vulgare L. POACEAE Barley

Donated by: Harlan, H.V., USDA, Idaho Agricultural Exp. Sta., Aberdeen, Idaho, United States. remarks: Released in 1952 and 1958. Received January 30, 1990.

origin: United States. cultivar: HARLAN. pedigree:
Selection from Composite Cross II, CIho 5461, F8. other
id: 36Ab6127. other id: CV-67. source: Crop Sci.
5(2):196 1965. group: CSR-BARLEY. remarks: Six-rowed,
feed, rough awned type. Maturity early to mid season.
Kernels blue and large. Seed weight 4.2 to 5.0gm per 100.
Yield high. Straw short and stiff. Resistant to lodging.
Spring Annual. Cultivar. Seed.

PI 539119. Hordeum vulgare L. POACEAE Barley

Donated by: Sprague, H.B., New Jersey Agric. Experiment Station, New Brunswick, New Jersey, United States. Received January 30, 1990.

origin: United States. cultivar: PASSOU. other id: CIho
7022. Annual. Cultivar. Seed.

PI 539120. Hordeum vulgare L. POACEAE Barley

Donated by: Svalof Branch Station, Svalof, Sweden. remarks: Released in Sweden in 1942. Received January 30, 1990.

PI 539120-continued

origin: Sweden. cultivar: EDDA. pedigree: Asplund/Vega. other id: CIho 7129. other id: CV-19. source: Agron. J. 45(7):320 1953. group: CSR-BARLEY. remarks: 6-rowed awned, hulled type with semi-lax spikes. Maturity early. Seeds medium large with blue aleurone. Seed weight 2.9 to 3.2gm per 100. Hulls semiwrinkled to wrinkled. Yield high. Malting qualities good when grown where adapted. Susceptible to covered smut (Ustilago hordei). Spring Annual. Cultivar. Seed.

PI 539121. Hordeum vulgare L. POACEAE Barley

Donated by: Svalof Plant Breeding Station., Svalof, Sweden. remarks: Released by Montana Agricultural Experiment Station in 1957. Received January 30, 1990.

origin: Sweden. cultivar: FREJA. pedigree:
Seger(Victory)/Opal. other id: CIho 7130. other id:
CV-47. source: Agron. J. 52(11):661 1960. group:
CSR-BARLEY. remarks: 2-rowed, rough awned, feed type.
Maturity midseason to late. Straw strength moderate.
Plant height short to medium. Beards rough. Glumes
covered with long hairs. Glume awns equal in length to
glumes. Hulls wrinkled. Veins moderately well developed,
with some barbs on laterals. Crease narrow to middle of
kernel but widens at awn end. Kernels white, short to
midlong. Seed weight 3.7 to 4.8gm per 100. Hulls. Spring
Annual. Cultivar. Seed.

PI 539122. Hordeum vulgare L. POACEAE Barley

Donated by: Hill, D.D., Oregon Agricultural Exp. Sta., Oregon State University, Corvallis, Oregon, United States. remarks: Released in 1945. Received January 30, 1990.

origin: United States. cultivar: CASCADE. pedigree: Selection from composite cross, CIho 5530. other id: CIho 7146. other id: CV-18. source: Agron. J. 42(1):54 1950. group: CSR-BARLEY. remarks: 6-rowed, rough-awned type. Plant height short to midtall. Maturity midseason to late. Spike lax, slightly nodding. Awn tips purple. Kernels blue and long. Seed weight 3.4 to 4.2gm per 100. Hulls slightly wrinkled. Straw moderately stiff. Winter hardy. 4 year yield average 2962kg per hectare. Winter Annual. Cultivar. Seed.

PI 539123. Hordeum vulgare L. POACEAE Barley

Donated by: Wyoming Agricultural Exp. Sta., Laramie, Wyoming, United States. remarks: Released in 1943. Received January 30, 1990.

origin: Sweden. cultivar: FRONTIER. pedigree: Selected from Composite Cross II, CIho 5461. other id: CIho 7155. other id: CV-31. source: Agron. J. 50(11):708 1958. group: CSR-BARLEY. remarks: 6-rowed, rough-awned type. Plant height midtall. Maturity medium late. Rachilla short haired. Kernels blue, midlong to long. Seed weight 3.1 to 5.2gm per 100. Hulls slightly wrinkled. Straw moderately strong. Some resistance to loose smut (Ustilago nuda). Adapted to Wyoming and western Nebraska. Spring Annual. Cultivar. Seed.

PI 539124. Hordeum vulgare L. POACEAE Barley

Donated by: Cross, C.B., Oklahoma Agricultural Exp. Sta., Stillwater, Oklahoma, United States. remarks: Released in 1945. Received January 30, 1990.

origin: United States. cultivar: HARBINE. pedigree: Selection from composite cross III, CIho 5530. other id: CIho 7524. other id: CV-21. source: Agron. J. 45(7):320 1953. group: CSR-BARLEY. remarks: 6-rowed, rough-awned, hulled, bearded, short, stiff strawed type with outstanding resistance to lodging. Spikes somewhat short and erect. Rachilla short haired. Kernels light blue, short to midlong. Seed weight 3.1 to 4.0gm per 100. Hulls slightly wrinkled to wrinkled. Straw short, stiff. Yield average 2962kg per hectare. Test weight high. Resistant to leaf rust (Puccinia hordei) and some races of loose smut. Winter Annual. Cultivar. Seed.

PI 539125. Hordeum vulgare L. POACEAE Barley

Donated by: Josephson, L.M., Kentucky Agricultural Exp. Sta., Lexington, Kentucky, United States. remarks: Distributed simultaneously by the Kentucky and Pennsylvania Agricultural Experiment Stations in 1951. Received January 30, 1990.

PI 539125-continued

origin: United States. cultivar: KENBAR. pedigree:
Selection from Composite Cross X, CIho 6625. other id:
CIho 7574. other id: CV-20. source: Agron. J. 45(7):320
1953. group: CSR-BARLEY. remarks: 6-rowed, rough-awned,
bearded type. Maturity early. Spikes semi-dence, short
and erect. Rachilla short haired. Kernels light blue and
short to midlong. Seed weight 3.4 to 3.8gm per 100. Hulls
slightly wrinkled. Yield high. Straw strong. Resistant to
many races of powdery mildew (Erysiphe graminis), scald
(Rhynchosporium secalis) and brown loose smut (Ustilago
nuda). Moderately winter hardy. Winter Annual.
Cultivar. Seed.

PI 539126. Hordeum vulgare L. POACEAE Barley

Donated by: Webster, O.J., Nebraska Agricultural Exp. Sta., Lincoln, Nebraska, United States. remarks: Developed cooperatively by the Oklahoma Agricultural Experiment Station and USDA-ARS. Distributed in 1952. Received January 30, 1990.

origin: United States. cultivar: KEARNEY. pedigree: Selection from Composite Cross III, CIho 5530. other id: CIho 7580. other id: CV-24. source: Agron. J. 45(7):320 1953. group: CSR-BARLEY. remarks: 6-rowed, rough-awned, type. Kernels blue or white, short to midlong. Seed weight 2.4 to 3.8gm per 100. Hulls slightly wrinkled to wrinkled. Malting qualities rated very satisfactory in Nebraska tests; mediocre in tests at the Barley and Malt Laboratory, Madison, Wisconsin due to small kernel size and high nitrogen. Weak straw. Some resistance to green bug (Sciizaphis graminum). Winter Annual. Cultivar. Seed.

PI 539127. Hordeum vulgare L. POACEAE Barley

Donated by: Johnson, T.E., Oklahoma Agricultural Exp. Sta., Stillwater, Oklahoma, United States. remarks: Cooperative research with USDA-ARS. Released in 1956. Received January 30, 1990.

PI 539127-continued

origin: United States. cultivar: ROGERS. pedigree: Selection from Composite Cross III, CIho 5530. other id: CIho 9174. other id: CV-28. source: Agron. J. 50(11):708 1958. group: CSR-BARLEY. remarks: 6-rowed, rough-awned, feed type with many tillers. Maturity midseason. Plants midtall to tall with stiff straw. Rachilla short haired. Kernels blue and short to midlong. Seed weight 3.2 to 3.6gm per 100. Hulls slightly wrinkled to semiwrinkled. Yield average 2514kg per hectare. Winter hardiness medium. Resistant to powdery mildew (Erysiphe graminis) and some races of loose smut (Ustilago nuda). Winter Annual. Cultivar. Seed.

PI 539128. Hordeum vulgare L. POACEAE Barley

Donated by: Shands, H.L., Wisconsin Agricultural Exp. Sta., Madison, Wisconsin, United States. remarks: Released in 1956. Received January 30, 1990.

origin: United States. cultivar: FOX. pedigree: Wisconsin Barbless 2/Pillsbury/Selection 12 from composite cross II (CIho 5146). other id: CIho 9190. remarks: 6-rowed, smooth-awned type. Maturity midseason. Plants midtall. Rachilla long haired. Kernels blue and short to midlong. Seed weight 3.5 to 3.8gm per 100. Hulls slightly wrinkled to semiwrinkled. Straw strength and lodging quality good. Limited sterility of the florets under certain condtions. Malting qualities poor. Moderate resistant to smuts (Ustilago ssp.), spot blotch (Cochliobolus sativus),. Spring Annual. Cultivar. Seed.

PI 539129. Hordeum vulgare L. POACEAE Barley

Donated by: Lamb, C.A., Ohio Agric. Res. and Development Center, (Ohio Agricultural Exp. Sta.), Wooster, Ohio, United States. remarks: Released in 1955. Received January 30, 1990.

origin: United States. cultivar: DAYTON. pedigree:
Selection from Composite Cross X, CIho 6625. other id:
CIho 9517. other id: CV-103. source: Crop Sci. 8(6):776
1968. group: CSR-BARLEY. other id: CH 47-115. remarks:
6-rowed, semismooth, awned type. Early growth
semiprostrate. Maturity early. Plants midtall. Spike lax,
midlong, and nodding. Rachilla short haired. Kernels
light blue and midlong. Seed weight 3.2 to 3.9gm per 100.
Hulls slightly wrinkled to semiwrinkled. Winterhardiness
moderate. Straw stiff. Yield high. Winter Annual.
Cultivar. Seed.

PI 539130. Hordeum vulgare L. POACEAE Barley

Donated by: Eslick, R.F., Montana Agric. Exp. Sta., Boseman, Montana, United States. remarks: Released in 1953. Received January 30, 1990.

origin: United States. cultivar: ELLIS. pedigree: Selection from Composite Cross X, CIho 6625. other id: CIho 9529. remarks: 6-rowed, rough awned type. Maturity late. Rachilla short haired. Kernels white and midlong. Seed weight 2.8 to 3.6gm per 100. Hulls semiwrinkled to wrinkled. Straw moderately stiff. Winterhardiness moderate. Winter Annual. Cultivar. Seed.

PI 539131. Hordeum vulgare L. POACEAE Barley

Donated by: Gaines, E.F., Washington Agricultural Exp. Sta., Pullman, Washington, United States. remarks: Released in 1953. Received January 30, 1990.

origin: United States. cultivar: HEINES HANNA.
pedigree: Parentage unknown. other id: CIho 9532. other
id: CV-48. source: Agron. J. 52(11):661 1960. group:
CSR-BARLEY. remarks: 2-rowed, rough awned type. Maturity
midseason to late. Plants midtall. Spikes lax and long.
Rachilla long haired. Kernels white, midlong. Seed weight
4.2 to 4,8gm per 100. Hulls finely wrinkled. Straw
strength medium. Spring Annual. Cultivar. Seed.

PI 539132. Hordeum vulgare L. POACEAE Barley

Donated by: Saatzuchtwirtschaft,, Fred. Meine, Schnega, Hanover, Niedersachsen, Germany, Federal Rep of. remarks: Released in 1964. Received January 30, 1990.

origin: Germany, Federal Rep of. cultivar: PIROLINE.
pedigree: Weienstephaner Mahltauresistente
C.P./Morgenrot. other id: CIho 9558. other id: CV-110.
source: Crop Sci. 09(4):0520 1969. group: CSR-BARLEY.
remarks: 2-rowed, rough awned type. Maturity early.
Rachilla short haired. Straw stiff. Kernels white.
Lodging resistance good. Easily thrashed but quite
resistant to shattering. Moderate resistance to barley
yellow dwarf virus and powdery mildew (Erysiphe
graminis). Released as a feed barley in southern Idaho in
1956 and as a malting barley in 1964. Tetonia dryland
yield average 2167kg per hectare; Aberdeen irrigated.
received as: H. distichon. Spring Annual. Cultivar.
Seed.

PI 539133. Hordeum vulgare L. POACEAE Barley

Donated by: Huntley, D.N., Ontario Agricultural College, Guelph, Ontario, Canada. remarks: Released in 1954. Received January 30, 1990.

origin: Canada. cultivar: KENATE. pedigree: Hybrid selection from Composite Cross X, CIho 6625. other id: CIho 9570. other id: C.A.N. 232. remarks: 6-rowed, semismooth awned type. Maturity early to midseason. Plants medium tall. Spikes lax to dense. Rachilla short haired. Kernels light blue and short to midlong. Seed weight 3.4 to 4.3gm per 100. Hulls slightly wrinkled to semiwrinkled. Winterhardiness moderate. Straw moderately strong. Resistant to some races fo powdery mildew (Erysiphe graminis). Susceptible to leaf rust (Puccinia hordei) and. received as: H. distichon. Winter Annual. Cultivar. Seed.

PI 539134. Hordeum vulgare L. POACEAE Barley

Donated by: McGill, D.P., Nebraska Agricultural Exp Sta., Lincoln, Nebraska, United States. remarks: Developed in cooperation with USDA-ARS and released in 1961. Received January 30, 1990.

origin: United States. cultivar: CHASE. pedigree:
Single plant selection from CIho 7404 fron Korea. other
id: CIho 9581. other id: Nebraska 52434. other id:
CV-60. source: Crop Sci. 4(6):666 1964. group:
CSR-BARLEY. remarks: 6-rowed, hulled rough deciduous
awned, type. Rachilla long haired. Aleurone white.
Similar to Kearney (CIho 7580, PI 539126 in general
appearance, plant height and maturity, but with less
winterhardiness. Good straw strength. Lodging resistance
very high. Test weight 600kg per cubic meter. Yield
2682kg per hectare. received as: H. distichon. Winter
Annual. Cultivar. Seed.

PI 539135. Hordeum vulgare L. POACEAE Barley

Donated by: Robertson, D.W., Colorado Agricultural Exp. Sta., Fort Collins, Colorado, United States. remarks: Released in 1954. Received January 30, 1990.

PI 539135-continued

origin: United States. cultivar: MORAVIAN. pedigree: Selection from a 1949 introduction, the later of two with same cultivar name. other id: CIho 10107. other id: CV-71. source: Crop Sci. 5(2):197 1965. group: CSR-BARLEY. other id: New Moravian. remarks: 2-rowed, rough awned type. Maturity late. Plants midtall. Spike lax and long. Rachilla long haired. Kernels white and short. Seed weight 3.8 to 4.2gm per 100. Hulls finely wrinkled. received as: H. distichon. Spring Annual. Cultivar. Seed.

PI 539136. Hordeum vulgare L. POACEAE Barley

Donated by: Price, P.B., South Dakota State University, Brookings, South Dakota, United States. Received January 30, 1990.

origin: United States. cultivar: JOTUN. other id: CIho
11670. Annual. Cultivar. Seed.

PI 539137. Hordeum vulgare L. POACEAE Barley

Donated by: Suneson, C.A., USDA-ARS, California Agricultural Exp. Sta., Berkley, United States. remarks: Cooperatively developed with USDA-ARS and released in 1964. Received January 30, 1990.

origin: United States. cultivar: GRANDE. pedigree: F21 selection from Composite Cross II, CIho 5461. other id: CIho 11758. other id: CV-76. source: Crop Sci. 5(2):198 1965. group: CSR-BARLEY. other id: CAS 1358. remarks: 6-rowed, rough awned, feed type. Maturity late. Growth habit prostrate during winter. Heads and seeds large. Resistance or tolerance to foliar diseases, powder mildew (Erysiphe graminis), net blotch (Pyrenophora teses), and scald (Rhynchosporium secalis). Spring Annual. Cultivar. Seed.

PI 539138. Hordeum vulgare L. POACEAE Barley

Donated by: Suneson, C.A., USDA-ARS, California Agricultural Exp. Sta., Berkley, United States. remarks: Cooperatively developed with USDA-ARS and released on 30 September, 1967. Received January 30, 1990.

PI 539138-continued

origin: United States. cultivar: HARLAND. pedigree:
Developed by evolutionary breeding from Composite Crosses
II, V, XII, XIV, and XV through the use of male sterility
in a basic parentage of 700 lines. The population variety
is The F13 of composite Cross XVI. other id: CIho 13445.
other id: CV-101. source: Crop Sci. 8(4):514 1968.
group: CSR-BARLEY. remarks: 6-rowed, white, covered,
awned, feed type. Some traces of 2-rowed spikes with
black and hulless seeds. Reaction to major foliar
diseases varies conspicuously from plant to plant, but
presents a favorable average. Spring Annual. Cultivar.
Seed.

PI 539139. Hordeum vulgare L. POACEAE Barley

Donated by: Heyne, E.G., USDA-ARS, Kansas Agricultural Exp. Sta., Manhattan, Kansas, United States. remarks: Cooperatively developed with USDA-ARS and released on 18 October, 1973. Received January 30, 1990.

origin: United States. cultivar: KANBY. pedigree:
Selection from a composite cross resulting from
intercross of 18 winter cultivars. This composte received
from USDA-ARS. A genetic male sterile factor was
involved. other id: CIho 15493. other id: CV-141.
source: Crop Sci. 15(1):97 1975. group: CSR-BARLEY.
other id: KS 66217. remarks: 6-rowed, rough awned, feed
type. Maturity midseason. Plants midtall. Spikes
semi-lax, mid-length. Kernels white hulled with slightly
wrinkled lemas, rachilla short haired and aleurone
colorless. Straw length and strength varies from short
and stiff to tall and moderately weak depending on the
environment. "Winter hardiness similar to Will. Exceeds
Will in test weight and yield, Low percentage of loose
smut. Winter Annual. Cultivar. Seed.

PI 539140. Hordeum vulgare L. POACEAE Barley

Donated by: Bohenblust, K.E., Wyoming Agricultural Exp. Sta., University of Wyoming, Laramie, Wyoming, United States. remarks: Released in 1978. Received January 30, 1990.

PI 539140-continued

origin: United States. cultivar: HERB. pedigree:
Selection from a composite cross resulting from
intercross of 18 winter cultivars. This composte received
from USDA-ARS. A genetic male sterile factor was
involved. other id: CIho 15814. other id: CV-164.
source: Crop Sci. 19(5):741 1979. group: CSR-BARLEY.
other id: WY 6823. remarks: 6-rowed, semi-smooth, awned,
feed type. Spikes erect. Rachilla long haired. Rachis
with numerous hairs. Kernels small. Hulls finely
wrinkled. Aleurone white. Straw strength good. Moderately
susceptible to covered smut (Ustilago hordei). Winter
Annual. Cultivar. Seed.

PI 539141. Ipomoea batatas (L.) Lam. CONVOLVULACEAE Sweet potato

Donated by: Martin, F.W., Tropical Agric. Research Station, P.O. Box 70, Mayaguez, Puerto Rico. Received May 19, 1989.

origin: Nigeria. cultivar: TIB8. other id: A3. remarks: Used as an indicator for white fly component of sweet potato virus disease. Cultivated. Tissue Culture.

PI 539142 to 539855. Citrus and Relatives

Donated by: Citrus Variety Collection, Dept. of Botany and Plant Sciences, University of California, Riverside, California, United States. remarks: Citrus and Citrus relative accessions at the Repository in Riverside without PI numbers. Received March 01, 1990.

- PI 539142 Aegle marmelos (L.) Corr. Serr. RUTACEAE Citrus relative donor id: CRC 3140. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Indian bael fruit. remarks: Open growth, attractive tree. Tree. Seed.
- PI 539143 Aeglopsis chevalieri Swingle RUTACEAE Citrus relative donor id: CRC 2878. origin: UNKNOWN. local name: Chevalier's aeglopsis. remarks: Open growth, not as attractive as Aegle marmelos. Tree. Seed.
- PI 539144 Atalantia ceylanica (Arn.) Oliver RUTACEAE Citrus relative donor id: CRC 3287. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Ceylon atalantia. remarks: Described in Citrus Industry, Vol 1, p 324. Tree. Seed.

- PI 539145 Atalantia citroides Pierre ex Guillaumin RUTACEAE Citrus relative donor id: CRC 1430. origin: UNKNOWN. local name: Cochin China Atalantia. remarks: Small yellow-green fruits, 4 carpellate, seedless/occasional seed. Nice appearing, compact, small tree. Tree. Cutting.
- PI 539146 Atalantia sp. RUTACEAE Citrus relative donor id: CRC 3725. origin: UNKNOWN. pedigree: same as A. ceylanica?. local name: Ceylon atalantia. remarks: Barely surviving; other Atalantias doing better; may be environmentally non-adapted to Riverside. Tree. Seed.
- PI 539147 Balsamocitrus dawei Stapf RUTACEAE Citrus relative donor id: CRC 3514. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Uganda powder-flask fruit. remarks: Monoembryonic. See The Citrus Industry, Vol 1, pp 414-415. Field tree in Riverside died; kept in greenhouse and lathhouse only. Tree. Seed.
- PI 539148 Calodendrum capense Thunb. RUTACEAE Citrus relative donor id: CRC 3517. origin: UNKNOWN. local name: Cape Chestnut. Tree.
- PI 539149 Citropsis gilletiana Swingle & M. Kellerman RUTACEAE Citrus relative donor id: CRC 3296. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Gillet's cherry orange. remarks: Originally from Fairchild Gardens, Florida. Described in The Citrus Industry, Vol 1, pp 306-308. Trees better than Citropsis schweinfurthii but probably not promising for Riverside. Tree. Cutting.
- PI 539150 Citrus asahikan hort. ex T. Tanaka RUTACEAE Pummelo hybrid donor id: CRC 3905. origin: UNKNOWN. cultivar: Asahikan. remarks: Had thermotherapy to eliminate tristeza. See The Citrus Industry, Vol 1, p 552. Tree. Cultivar. Cutting.
- PI 539151 Citrus aurantiifolia (Christm.) Swingle RUTACEAE Lime donor id: CRC 1710. origin: UNKNOWN. cultivar: Mexican. local name: Mexican, West Indian, Key. remarks: Psorosis and exocortis removed by shoot tip grafting 1985, probably also removed vein enation. Fruit of CRC 1710 (Mexican), 1813 (West Indian), 2188 (Key), and 2449 (Everglade) apparently identical. Tree. Cultivar. Cutting.

PI 539142 to 539855-continued

- PI 539152 Citrus aurantiifolia (Christm.) Swingle RUTACEAE Lime donor id: CRC 1813. origin: UNKNOWN. cultivar: West Indian. local name: West Indian, Mexican, Key. remarks: True West Indian or Mexican lime. Tree. Cultivar. Cutting.
- PI 539153 Citrus aurantiifolia (Christm.) Swingle RUTACEAE Lime donor id: CRC 2188. origin: UNKNOWN. cultivar: Stow #7. local name: Key, West Indian, Mexican. remarks: Seedling yellows removed by thermotherapy 1985. Tree. Cultivar. Seed.
- PI 539154 Citrus aurantiifolia (Christm.) Swingle RUTACEAE Lime donor id: CRC 2449. origin: UNKNOWN. cultivar:

 Everglade. local name: West Indian. remarks: Exocortis and psorosis removed by shoot tip grafting 1985.

 Apparently identical to CRC Nos. 1710, 1813, and 2188.

 Tree. Cultivar. Plant.
- PI 539155 Citrus aurantiifolia (Christm.) Swingle RUTACEAE Lime donor id: CRC 2450. origin: UNKNOWN. cultivar: India. remarks: Small leaves; short internodes; rosette-type growth; pink flowers borne in clusters; small, yellow fruits set in clusters; acid--tastes like lime; white flesh; knobby trunk; fruit virtually identical to CRC 3070 (India lime sport); sport tree seems more compact. Tree. Cultivar. Plant.
- PI 539156 Citrus aurantiifolia (Christm.) Swingle RUTACEAE Lime donor id: CRC 2683. origin: UNKNOWN. cultivar:
 Thornless Mexican. remarks: Fruit virtually indistinguishable from Mexican lime. Tree. Cultivar. Cutting.
- PI 539157 Citrus aurantiifolia (Christm.) Swingle RUTACEAE Lime donor id: CRC 3762. origin: UNKNOWN. cultivar:
 Abhayapuri. remarks: Seeds from Malaysia. Long-axis type of Mexican lime. Polyembryonic. Very firm fruit with slightly thicker rind than Mexican, about as seedy. Would be difficult to squeeze. Tree. Cultivar. Seed.
- PI 539158 Citrus aurantiifolia (Christm.) Swingle RUTACEAE Lime donor id: CRC 712. origin: UNKNOWN. cultivar: Santa Barbara. local name: Santa Barbara red lime. remarks: Fruit small, compressed, globose, orange-red flesh like ordinary lime, not as sweet; suggests Rangpur lime to some extent but probably distinct. Exocortis removed by shoot tip grafting 1985. This and CRC Nos. 131, 2319, 2318, 2424, 2451, and 2875 very similar based on 1988 crop. Tree. Cultivar. Cutting.

- PI 539159 Citrus aurantium L. RUTACEAE Bittersweet orange donor id: CRC 1588. origin: UNKNOWN. cultivar: Orlando. pedigree: Open pollinated seedling. local name: Orlando bittersweet. remarks: Typical bittersweet orange. Tree. Cultivar. Seed.
- PI 539160 Citrus aurantium L. RUTACEAE Bittersweet orange donor id: CRC 2541. origin: UNKNOWN. cultivar: Dummett. pedigree: Open pollinated seedling. local name: Dummett bittersweet. Tree. Cultivar. Seed.
- PI 539161 Citrus aurantium L. RUTACEAE Sour orange donor id: CRC 1689. origin: UNKNOWN. cultivar:
 Brazilian. pedigree: Open pollinated seedling. remarks:
 Typical sour orange fruit. Tree. Cultivar. Seed.
- PI 539162 Citrus aurantium L. RUTACEAE Sour orange donor id: CRC 2192. origin: UNKNOWN. cultivar: Stow #20. pedigree: Open pollinated seedling. remarks: Exocortis removed by shoot tip grafting 1985. Looks and tastes like typical sour orange; not bittersweet. Seems as acid as Seville sour, much more sour than Orlando bittersweet. Tree. Cultivar. Seed.
- PI 539163 Citrus aurantium L. RUTACEAE Sour orange donor id: CRC 2624. origin: UNKNOWN. cultivar: Keen #1-10. local name: Keen. remarks: Typical sour orange. Tree. Cultivar. Cutting.
- PI 539164 Citrus aurantium L. RUTACEAE Sour orange donor id: CRC 2717. origin: UNKNOWN. cultivar: Olivelands. remarks: Very prolific. Typical sour orange. Tree. Cultivar. Cutting.
- PI 539165 Citrus aurantium L. RUTACEAE Sour orange donor id: CRC 3133. origin: UNKNOWN. cultivar: Gadadehi. pedigree: Open pollinated seedling. remarks: Heavy crop of grapefruit-sized fruit; resemble grapefruit but rougher, thicker rind. Tree. Cultivar. Seed.
- PI 539166 Citrus aurantium L. RUTACEAE Sour orange donor id: CRC 3289. origin: UNKNOWN. local name: Willowleaf sour orange. remarks: Leaves extremely long and narrow. received as: Citrus aurantium var. salicifolia. Tree.

PI 539142 to 539855-continued

- PI 539167 Citrus aurantium L. RUTACEAE Sour orange
 donor id: CRC 3728. origin: UNKNOWN. cultivar:
 Chinotto. pedigree: C. myrtifolia x C. aurantium?.
 local name: Chinotto variant. remarks: Attractive,
 compact tree but few fruit; fruit similar to Chinotto,
 but may be smaller, with smoother rind, lighter rind
 color; interior similar to Chinotto but coarser, drier,
 more sour; darker green foliage than Chinotto. Tree.
 Cultivar. Cutting.
- PI 539168 Citrus aurantium L. RUTACEAE Sour orange
 donor id: CRC 3855. origin: UNKNOWN. cultivar:
 Rubidoux. pedigree: Open pollinated seedling. local
 name: Rubidoux sour orange. remarks: Typical sour orange
 fruit. Tree. Cultivar. Seed.
- PI 539169 Citrus aurantium L. RUTACEAE Sour orange donor id: CRC 3856. origin: UNKNOWN. cultivar: Seville. local name: Seville sour orange. remarks: See The Citrus Industry, Vol 1, p 374. Typical sour orange fruit. Tree. Cultivar. Seed.
- PI 539170 Citrus aurantium L. RUTACEAE Sour orange donor id: CRC 3929. origin: UNKNOWN. cultivar: Goutoucheng. local name: Goutoucheng sour orange. Tree. Cultivar. Seed.
- PI 539171 Citrus aurantium L. RUTACEAE Sour orange donor id: CRC 3930. origin: UNKNOWN. cultivar: Zhuluan. local name: Zhulan sour orange. Tree. Cultivar. Seed.
- PI 539172 Citrus aurantium L. RUTACEAE Sour orange donor id: CRC 3981. origin: UNKNOWN. cultivar: Zhuluan. Tree. Cultivar. Cutting.
- PI 539173 Citrus aurantium L. RUTACEAE Sour orange donor id: CRC 4004. origin: UNKNOWN. cultivar: Gou Tou. local name: Gou Tou, Leather Head sour orange. Tree. Cultivar. Seed.
- PI 539174 Citrus aurantium L. RUTACEAE Sour orange donor id: CRC 571. origin: UNKNOWN. cultivar: Bouquet des Fleurs. local name: Bouquet bitter orange. remarks: Trees supposed to have come originally from Florida. Flowers used by French in making perfume. Exocortis removed by shoot tip grafting 1985. Tree. Cultivar. Cutting.

- PI 539175 Citrus aurantium L. RUTACEAE Sour orange
 donor id: CRC 622. origin: UNKNOWN. cultivar:
 Variegated. remarks: Exocortis removed by shoot tip
 grafting 1985. Description of Panache in Citrus Industry
 fits this accession well. Variegation in foliage
 scattered in tree; most leaves have none. Fruit
 variegation in virtually all fruit to greater or lesser
 extent; this consists of depressed rind areas of light
 yellow, generally running longitudinally from stem end to
 apex. On some fruits, most of rind surface. Tree.
 Cultivar. Cutting.
- PI 539176 Citrus aurantium L. RUTACEAE Sour orange donor id: CRC 628. origin: UNKNOWN. cultivar: Standard. remarks: Selected as most typical, normal type of sour orange. Referred to as Standard sour. Tree. Cultivar. Cutting.
- PI 539177 Citrus aurantium L. RUTACEAE Sour orange hybrid donor id: CRC 760. origin: UNKNOWN. cultivar: Citrus vulgaris. pedigree: Open pollinated seedling. local name: Japanese orange. remarks: Name given in Philippines? Seedling yellows removed by thermotherapy 1985. Does not appear in Citrus Industry. Appears to be sour orange. Fruit indicates possible citron hybrid. Young flesh dark purple. Tree. Cultivar. Seed.
- PI 539178 Citrus benikoji hort. ex T. Tanaka RUTACEAE Tangor donor id: CRC 3149. origin: UNKNOWN. pedigree: C. reticulata x C. sinensis (unknown cultivars) Open pollinated seedling. local name: Benikoji, Dai Koji. Tree. Seed.
- PI 539179 Citrus bergamia Risso & Poit. RUTACEAE Sour orange hybrid donor id: CRC 2881. origin: UNKNOWN. cultivar: Bergamot. pedigree: C. aurantium x C. limon?. local name: Bergamotier, Bergamotto, Bergamot. remarks: Fruit fits Citrus Industry description (Vol 1, pp 494-496). Tree. Cultivar. Cutting.
- PI 539180 Citrus bergamia Risso & Poit. RUTACEAE Sour orange hybrid donor id: CRC 3506. origin: UNKNOWN. cultivar: Bergamotto #18. pedigree: Open pollinated seedling. local name: Bergamot Lisbon. remarks: Exocortis removed by shoot tip grafting. Tree. Cultivar. Cutting.

- PI 539181 Citrus canaliculata hort. ex Yuich. Tanaka RUTACEAE Sour orange hybrid donor id: CRC 3565. origin: UNKNOWN. pedigree: C. aurantium x C. paradisi (unknown cultivars) Open pollinated seedling. local name: Kikudaidai. remarks: Medium-large yellow fruit; rind rough, similar to rough lemon, medium thick; flesh yellow; hollow core; many seeds; very sour; very short inflorescence; leaves broad with large petiole wings. Tree. Cutting.
- PI 539182 Citrus celebica Koord. RUTACEAE Papeda hybrid donor id: CRC 3842. origin: UNKNOWN. cultivar: C. macrophylla. local name: Alemow, Colo. remarks: See The Citrus Industry, Vol 1, p 569. Tree. Cultivar. Cutting.
- PI 539183 Citrus clementina hort. ex T. Tanaka RUTACEAE Mandarin donor id: CRC 279. origin: UNKNOWN. cultivar: Clementine. local name: Algerian. Tree. Cultivar. Cutting.
- PI 539184 Citrus clementina hort. ex T. Tanaka RUTACEAE Mandarin donor id: CRC 3987. origin: UNKNOWN. cultivar: Clementine Caffin. remarks: See Int Soc Citriculture Proceedings, 1981, pp 101-2: mild taste, small fruit, tendency to fruit split, slow tree growth, poor parthenocarpic activity requiring GA treatment for fruit setting, sensitive to soil salinity and mites. Tree. Cultivar. Cutting.
- PI 539185 Citrus clementina hort. ex T. Tanaka RUTACEAE Mandarin donor id: CRC 3988. origin: UNKNOWN. cultivar: Clementine Sidi Aissa. Tree. Cultivar. Cutting.
- PI 539186 Citrus clementina hort. ex T. Tanaka RUTACEAE Mandarin donor id: CRC 3999. origin: UNKNOWN. cultivar: Clementina Fina. local name: Clementina Fina, Sodea. Tree. Cultivar. Cutting.
- PI 539187 Citrus davaoensis (Wester) T. Tanaka RUTACEAE Lime donor id: CRC 2427. origin: UNKNOWN. cultivar: Davao. local name: Davao lemon, Kalpi lime. remarks: Psorosis removed by shoot tip grafting 1985. Very similar to C. excelsa, CRC No. 2316. Tree. Cultivar. Plant.
- PI 539188 Citrus deliciosa Ten. RUTACEAE Mandarin donor id: CRC 3843. origin: UNKNOWN. cultivar: Willowleaf. local name: Mediterranean. remarks: See The Citrus Industry, Vol 1, pp 507-509. Tree. Cultivar. Seed.

PI 539142 to 539855-continued

- PI 539189 Citrus depressa Hayata RUTACEAE Mandarin donor id: CRC 2710. origin: UNKNOWN. local name: C. pectinifera, Shekwasha. remarks: Small, very sour mandarin. Appears identical to CRC No. 2448. Tree. Cutting.
- PI 539190 Citrus erythrosa hort. ex T. Tanaka RUTACEAE Mandarin donor id: CRC 3292. origin: UNKNOWN. cultivar: Fukushu. local name: Fukushu, Kobeni. remarks: Early mandarin type, puffy fruit, seedy. Tree. Cultivar. Cutting.
- PI 539191 Citrus erythrosa hort. ex T. Tanaka RUTACEAE Mandarin donor id: CRC 3986. origin: UNKNOWN. cultivar: Kobeni Mikan. local name: Kobeni-mikan, Fukushu. Tree. Cultivar. Cutting.
- PI 539192 Citrus excelsa Wester RUTACEAE Lime
 donor id: CRC 2316. origin: UNKNOWN. local name: Le
 Nestour, Limon Real. remarks: Medium-size fruit, medium
 yellow, basically smooth but variably bumpy; round with
 flattened base and blunt nose surrounded by depressed
 ring; rind thin; seedy, flesh ricey, white to yellow,
 very sour. Used as an indicator plant for
 tatterleaf-citrange stunt. Tree. Cutting.
- PI 539193 Citrus excelsa Wester RUTACEAE Lime
 donor id: CRC 2317. origin: UNKNOWN. cultivar: Limon
 Real. remarks: Psorosis removed by shoot tip grafting
 1985. Fruit much like smooth, round lemon; lemon-like in
 flavor, seedy. Some Fruits have persistent style. Tree.
 Cultivar. Cutting.
- PI 539194 Citrus excelsa Wester RUTACEAE Lime donor id: CRC 2892. origin: UNKNOWN. remarks: Exocortis removed by shoot tip grafting 1986. Appears identical to Citrus excelsa, CRC No. 2316. Tree. Seed.
- PI 539195 Citrus funadoko hort. ex Yuich. Tanaka RUTACEAE Tangelo donor id: CRC 3274. origin: UNKNOWN. pedigree: C. paradisi x C. reticulata (unknown cultivars) Open pollinated seedling. local name: Funadoko orange. remarks: From T. Tanaka in Citrologia, p. 49, 1961: "Compact shrub, seeds polyembryonic, susceptible to sunburning, sizes well in Japan." W.P. Bitters 1963: "Small fruit...smooth-skinned, light orange; slightly oblate; rind 3 mm thick; 15-20 seeds, appears polyembryonic; leaves similar to orange, slightly smaller; flesh tender, somewhat bitter. Not commercial variety but might be possible. Tree. Cutting.

- PI 539196 Citrus halimii Stone RUTACEAE Citron hybrid donor id: CRC 3780. origin: UNKNOWN. local name: mountain citron. remarks: Trees doing poorly, possibly due to Riverside climate and/or smog. Tree. Seed.
- PI 539197 Citrus halimii Stone RUTACEAE Citron hybrid donor id: CRC 3900. origin: UNKNOWN. local name:

 Mountain citron. remarks: Does not do well in field in Riverside, California; kept in lathhouse and greenhouse only. Tree. Seed.
- PI 539198 Citrus hanaju Siebold ex Shirai RUTACEAE Papeda donor id: CRC 3469. origin: UNKNOWN. cultivar: Hanayu. pedigree: Open pollinated seedling. local name: Tokoju, Hanayu. remarks: Yuzu type; polyembryonic. Tree. Cultivar. Seed.
- PI 539199 Citrus hassaku hort. ex T. Tanaka RUTACEAE Pummelo hybrid donor id: CRC 3907. origin: UNKNOWN. cultivar: Hassaku. local name: Citrus hassaku, Beni Hassaku. remarks: Had thermotherapy to remove psorosis and tristeza. See The Citrus Industry, Vol 1, pp 548-549. Large fruit; 20-30 seeds; thick peel; tastes like grapefruit; not juicy; thick segment membrane. Tree. Cultivar. Cutting.
- PI 539200 Citrus hiroshimana hort. ex Yuich. Tanaka RUTACEAE Grapefruit donor id: CRC 3904. origin: UNKNOWN. cultivar: Natsuzabon. Tree. Cultivar. Cutting.
- PI 539201 Citrus hiroshimana hort. ex Yuich. Tanaka RUTACEAE
 Grapefruit hybrid
 donor id: CRC 3275. origin: UNKNOWN. pedigree: Open
 pollinated seedling. local name: Natsuzabon. remarks:
 More like pummelo than grapefruit. Leaves narrower than
 most pummelos, young growth not pubescent. Fruit like
 large pummelo. Rind deep yellow, moderately rough, thick;
 large pithy core; seedy; flesh light yellow with touch of
 pink; raggy; sour; only moderately juicy. Tree.
 Cutting.
- PI 539202 Citrus hybrid RUTACEAE Grapefruit hybrid donor id: CRC 3602. origin: UNKNOWN. cultivar:
 Oroblanco (U.C. patent). pedigree: C. maxima 'Siamese Sweet' x C. paradisi '4n Marsh'. local name: Oroblanco, Gold fruit. remarks: Triploid hybrid of 2N acidless pummelo X 4N seedy white grapefruit. Patent held by University of California. Tree. Cultivar. Cutting.

- PI 539203 Citrus hybrid RUTACEAE Grapefruit hybrid donor id: CRC 3764. origin: UNKNOWN. cultivar: Melogold (U.C. patent). pedigree: C.grandis 'Siamese Acidless' x C.paradisi '4n Marsh'. local name: Melogold. remarks: Triploid hybrid of acidless pummelo X 4N seedy Marsh grapefruit. Sister seedling to Oroblanco. See Calif Agriculture, Vol 40, Nos 1 & 2, pp 30-31, Jan-Feb 1986. Patent held by University of California. Tree. Cultivar. Cutting.
- PI 539204 Citrus hybrid RUTACEAE Lemon
 donor id: CRC 2322. origin: UNKNOWN. cultivar: India.
 Tree. Cultivar. Plant.
- PI 539205 Citrus hybrid RUTACEAE Lemon hybrid donor id: CRC 2458. origin: UNKNOWN. cultivar: Perrine. pedigree: C. aurantiifolia 'Mexican' x C. limon 'Genoa'. local name: Perrine lemon. Tree. Cultivar. Cutting.
- PI 539206 Citrus hybrid RUTACEAE Lemon hybrid donor id: CRC 2459. origin: UNKNOWN. pedigree: C. aurantiifolia x C. limon (unknown cultivars). local name: Lemonime. remarks: Fruit strange, totally different from Perrine (CRC 2458). Very long, small neck, more like some gourds; small fruit, flesh very dry, very little juice. Tree. Cutting.
- PI 539207 Citrus hybrid RUTACEAE Lemon hybrid donor id: CRC 3487. origin: UNKNOWN. cultivar: Kulu. pedigree: Open pollinated seedling. local name: Kulu lemon. remarks: Seedling yellows removed by thermotherapy 1986. Foliage typical of citron; fruit large, generally elongate but variable; rind yellow, very thick, medium-smooth; interior typical citron; seedy, sour; many fruits have persistent style. Reported to be cold-resistant to 18 F. Tree. Cultivar. Seed.
- PI 539208 Citrus hybrid RUTACEAE Lemon hybrid donor id: CRC 3748. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: 3748 lemon. remarks: Seed from Chiengmai, Thailand. Compact tree; leaves large with wide, winged petioles, like pummelo or grapefruit; long, sharp spines; fruit medium-large, globose, flattened at apex; smooth, yellow rind; internal appearance like thick-rinded lemon; sour, lemon-like flavor; seedy. Tree. Cutting.

- PI 539209 Citrus hybrid RUTACEAE Lemon hybrid donor id: CRC 3841. origin: UNKNOWN. cultivar:
 Nicaraguan. pedigree: C. medica x C. limon?. local name: Nicaraguan lemon. remarks: Ratty looking tree, not compact and attractive like Meyer lemon; fruit small, light yellow, persistent style; interior appearance, flavor lemon-like; seedy. Tree. Cultivar. Seed.
- PI 539210 Citrus hybrid RUTACEAE Lemon hybrid donor id: CRC 3924. origin: UNKNOWN. cultivar: Peretta. pedigree: C. medica x C. limon ?. remarks: Exocortis and psorosis removed by shoot tip grafting. Acidless. Tree. Cultivar. Cutting.
- PI 539211 Citrus hybrid RUTACEAE Lemon hybrid donor id: CRC 710. origin: UNKNOWN. cultivar: Chinese Lemon. remarks: Exocortis removed by shoot tip grafting 1985. Tree. Cultivar. Seed.
- PI 539212 Citrus hybrid RUTACEAE Lime
 donor id: CRC 3072. origin: UNKNOWN. cultivar:
 Addanimma. pedigree: Open pollinated seedling. local
 name: Addanimma lime. remarks: Large for lime; yellow,
 elongate fruit, sour, moderately seedy. Tree. Cultivar.
 Seed.
- PI 539213 Citrus hybrid RUTACEAE Lime hybrid donor id: CRC 3070. origin: UNKNOWN. cultivar: India. local name: India lime. remarks: Attractive thornless tree; fruit not as attractive as ordinary lime, pale yellow, variable in size, flattened at ends. Very similar to India lime (CRC 2450) but more compact tree. Tree. Cultivar. Cutting.
- PI 539214 Citrus hybrid RUTACEAE Lime hybrid
 donor id: CRC 3200. origin: UNKNOWN. cultivar: Limoui
 sangui. pedigree: Open pollinated seedling. remarks:
 Introduced from Iran. Resembles small lemon with smoother
 rind than ordinary lemon, darker yellow; seedy, pulp
 medium yellow, very sour lemon flavor. Tree. Cultivar.
 Seed.
- PI 539215 Citrus hybrid RUTACEAE Mandarin hybrid donor id: CRC 2867. origin: UNKNOWN. cultivar: Calashu. pedigree: C. madurensis x C. unshiu Open pollinated seedling. remarks: Small, orange fruit; too sour to eat. Tree not as attractive as calamondin or Philippine calamandarin. Tree. Cultivar. Seed.
- PI 539216 Citrus hybrid RUTACEAE Mandarin hybrid donor id: CRC 3965. origin: UNKNOWN. cultivar: NISSV E. pedigree: unknown. Tree. Cultivar. Cutting.

- PI 539217 Citrus hybrid RUTACEAE Papeda hybrid donor id: CRC 3612. origin: UNKNOWN. cultivar: Kulobot. remarks: Somewhat weeping-appearing tree; leaves long, slender with winged petiole. Tree. Cultivar. Seed.
- PI 539218 Citrus hybrid RUTACEAE Pummelo hybrid donor id: CRC 3488. origin: UNKNOWN. cultivar: Yuma Ponderosa. pedigree: C. maxima x ?. local name: Yuma Ponderosa lemon. remarks: Exocortis removed by shoot tip grafting 1986. Foliage and fruit appear identical to CRC 1462, Cuban Shaddock. Tree. Cultivar. Cutting.
- PI 539219 Citrus hybrid RUTACEAE Pummelo hybrid donor id: CRC 3555. origin: UNKNOWN. cultivar: Cocktail. pedigree: C. reticulata 'Frua' x C. maxima 'Siamese Acidless'. local name: Cocktail grapefruit. remarks: Medium-large fruit, about like grapefruit; dark yellow, thin rind; dark yellow flesh; too seedy for commercial usage but makes good juice; unique flavor. Tree. Cultivar. Cutting.
- PI 539220 Citrus hybrid RUTACEAE Pummelo hybrid donor id: CRC 3769. origin: UNKNOWN. cultivar: New Zealand Grapefruit. pedigree: C. maxima x C. reticulata (unknown cultivars). local name: Poorman orange. remarks: Vein enation removed by thermotherapy. See The Citrus Industry, Vol 1, pp 550-1. Has trunk and branch bark condition described in CI, p 550; excessive seediness. Tree. Cultivar. Cutting.
- PI 539221 Citrus hybrid RUTACEAE Pummelo hybrid donor id: CRC 3781. origin: UNKNOWN. pedigree: C. maxima 'Tahitian' x C. paradisi 'Star Ruby'. remarks: Young growth highly pubescent. Fruit size of large grapefruit. Smooth, pale yellow, medium-thick rind; few seeds; flesh amber, juicy, melting; probably too sour for commercial or dooryard use in California; slight bitter aftertaste. Tree. Seed.
- PI 539222 Citrus hybrid RUTACEAE Pummelo hybrid donor id: CRC 3941. origin: UNKNOWN. cultivar: Puma. pedigree: C. maxima x C. paradisi (unknown cultivars). remarks: Thermotherapy during import processing. Tree. Cultivar. Cutting.
- PI 539223 Citrus hybrid RUTACEAE Pummelo hybrid donor id: CRC 3942. origin: UNKNOWN. cultivar: Hassaku. remarks: Thermotherapy to remove tristeza. See The Citrus Industry, Vol 1, pp 548-549. Tree. Cultivar. Cutting.

- PI 539224 Citrus hybrid RUTACEAE Pummelo hybrid donor id: CRC 42. origin: UNKNOWN. pedigree: C. maxima (unknown cultivar) x C. sinensis 'St. Michael'. remarks: Small, smooth fruit with leathery skin. Sour but highly flavored. About half of fruits seedless. Pulp tender; medium-sized pulp vesicles, orange colored. Foliage much like orange, but petiole wings broader. Flowers large. Tree. Cutting.
- PI 539225 Citrus hybrid RUTACEAE Sour orange hybrid donor id: CRC 3079. origin: UNKNOWN. cultivar: Gabbuchinee. pedigree: C. aurantium 'Bittersweet' x C. sinensis (unknown cultivars) Open pollinated seedling. local name: Gabbuchinee sour orange. remarks: Reported to be sport of bitter orange and sath gudi sweet orange and susceptible to many diseases. Fruit looks like common sour orange. Tree. Cultivar. Seed.
- PI 539226 Citrus hybrid RUTACEAE Sour orange hybrid donor id: CRC 3578. origin: UNKNOWN. pedigree: C. aurantiifolia 'Pursha' x C. myrtifolia. remarks: Very sour with some lime-like flavor, seedy, light orange flesh. Trees larger, less compact than Chinotto; fruits smaller, lighter colored; Chinotto seems better for ornamental use. Tree. Cutting.
- PI 539227 Citrus hybrid RUTACEAE Sour orange hybrid donor id: CRC 3681. origin: UNKNOWN. pedigree: (C. clementina x C. sinenis 'Hamlin') x C. myrtifolia Fl. remarks: From Yuma, Arizona. Tree. Cutting.
- PI 539228 Citrus hybrid RUTACEAE Sour orange hybrid donor id: CRC 3683. origin: UNKNOWN. pedigree: (53-1-16 Clem X Hamlin) X Chinotto, Fl. remarks: From Yuma, Arizona. Tree. Cutting.
- PI 539229 Citrus hybrid RUTACEAE Sour orange hybrid donor id: CRC 3684. origin: UNKNOWN. pedigree: (53-1-16 Clem. X Hamlin) X Chinotto, Fl. remarks: From Yuma, Arizona. Tree. Cutting.
- PI 539230 Citrus hybrid RUTACEAE Sour orange hybrid donor id: CRC 3702. origin: UNKNOWN. pedigree: (53-1-16 Clem. X Hamlin) X Chinotto Fl. remarks: From Yuma, Arizona. Tree. Cutting.
- PI 539231 Citrus hybrid RUTACEAE Sour orange hybrid donor id: CRC 3703. origin: UNKNOWN. pedigree: (53-1-16 Clem. X Hamlin) X Chinotto Fl. remarks: From Yuma, Arizona. Tree. Cutting.

- PI 539232 Citrus hybrid RUTACEAE Sour orange hybrid donor id: CRC 3705. origin: UNKNOWN. pedigree: (53-1-16 Clem. X Hamlin) X Chinotto Fl. remarks: From Yuma, Arizona. Tree. Cutting.
- PI 539233 Citrus hybrid RUTACEAE Sour orange hybrid donor id: CRC 3706. origin: UNKNOWN. pedigree: (53-1-16 Clem. X Hamlin) X Chinotto Fl. remarks: From Yuma, Arizona. Tree. Cutting.
- PI 539234 Citrus hybrid RUTACEAE Sour orange hybrid donor id: CRC 3709. origin: UNKNOWN. pedigree: (53-1-16 Clem. X Hamlin) X Chinotto Fl. remarks: From Yuma, Arizona. Tree. Cutting.
- PI 539235 Citrus hybrid RUTACEAE Sour orange hybrid donor id: CRC 3712. origin: UNKNOWN. pedigree: (53-1-16 Clem. X Hamlin) X Chinotto Fl. remarks: From Yuma, Arizona. Tree. Cutting.
- PI 539236 Citrus hybrid RUTACEAE Sour orange hybrid donor id: CRC 3715. origin: UNKNOWN. pedigree: (53-116 Clem. X Hamlin) X Chinotto Fl. remarks: From Yuma, Arizona. Tree. Cutting.
- PI 539237 Citrus hybrid RUTACEAE Sour orange hybrid donor id: CRC 693. origin: UNKNOWN. cultivar: Orogold. remarks: Fruit on parent tree oblong to pear-shaped, highly colored, heavy, juicy but with distasteful odor and flavor--like onion. May be sour orange hybrid. Fruit appears to be fairly typical sour or possibly bittersweet orange; definitely NOT a sweet orange, thick rind, many seeds. Foliage not typical of sour orange--cupped leaves, narrow winged petioles. About like a bittersweet in tartness of. Tree. Cultivar. Seed.
- PI 539238 Citrus hybrid RUTACEAE Sweet orange hybrid donor id: CRC 648. origin: UNKNOWN. pedigree: C. sinensis x C. medica (unknown cultivars). remarks: Two trees budded on Troyer died of bud union creasing. Tall, upright growth; much more vigor than most citrons here. Very short petioles without wings. Fruit is size of large lemon, elongate, slightly rough and ribbed; orange rind with green color persisting along ribs; apical end with prominent to flattened nipple; rind medium thick; flesh orange; few to moderate number of seeds. Tree. Cutting.

- PI 539239 Citrus hybrid RUTACEAE Tangor
 donor id: CRC 2224. origin: UNKNOWN. cultivar: Tankan.
 pedigree: C. reticulata x C. sinensis (unknown
 cultivars). local name: Tankan tangor. remarks:
 Seedling yellows removed by thermotherapy 1985. Small
 orange fruit; peels and sections readily; more
 mandarin-like than tangor-like. Flavor OK but too much
 rag. Apparently an alternate-bearer. Appears identical to
 CRC 3875. Tree. Cultivar. Plant.
- PI 539240 Citrus hybrid RUTACEAE Tangor
 donor id: CRC 3018. origin: UNKNOWN. cultivar: Dweet.
 pedigree: C. sinensis 'Mediterranean Sweet' x C.
 tangerina. local name: Dweet tangor. remarks: Seedling
 yellows removed by shoot tip grafting 1986. Tree.
 Cultivar.
- PI 539241 Citrus hybrid RUTACEAE Tangor donor id: CRC 3096. origin: UNKNOWN. cultivar: H-56. pedigree: C. deliciosa x C. sinensis 'Valencia'. Tree. Cultivar. Cutting.
- PI 539242 Citrus hybrid RUTACEAE Tangor
 donor id: CRC 3183. origin: UNKNOWN. cultivar: Mency.
 pedigree: C. sinensis 'Mediterranean Sweet' x C.
 tangerina. remarks: Small, orange fruit; too small for
 commercial use. Tree. Cultivar. Seed.
- PI 539243 Citrus hybrid RUTACEAE Tangor
 donor id: CRC 3368. origin: UNKNOWN. cultivar:
 Ortanique. pedigree: C. reticulata x C. sinensis
 (unknown cultivars). remarks: From Jamaica. See The
 Citrus Industry, Vol 1, pp 518-519. Tree. Cultivar.
 Cutting.
- PI 539244 Citrus hybrid RUTACEAE Tangor
 donor id: CRC 3810. origin: UNKNOWN. cultivar: Sue
 Linda Temple. pedigree: C. reticulata X C. sinensis
 (unknown cultivars). local name: Sue Linda. Tree.
 Cultivar. Cutting.
- PI 539245 Citrus hybrid RUTACEAE Tangor donor id: CRC 3875. origin: UNKNOWN. cultivar: Tankan. pedigree: C. reticulata x C. sinensis (unknown cultivars). local name: Tankan tangor. remarks: Appears identical to CRC 2224, Tankan. Tree. Cultivar. Seed.

- PI 539246 Citrus hybrid RUTACEAE Tangor
 donor id: CRC 3952. origin: UNKNOWN. cultivar: Kiyomi
 H-12. pedigree: C. reticulata x C. sinensis (unknown
 cultivars). local name: Kiyomi H-12 tangor. remarks:
 See Citrograph 72(2): 29-30, 32, Dec. 1986: medium-large
 fruit, flat, seedless, juicy, orange-scented. Tree.
 Cultivar. Cutting.
- PI 539247 Citrus hybrid RUTACEAE Tangor
 donor id: CRC 3980. origin: UNKNOWN. cultivar: Iyo.
 pedigree: C. reticulata x C. sinensis (unknown
 cultivars). remarks: See The Citrus Industry, Vol 1, p
 531. Tree. Cultivar. Cutting.
- PI 539248 Citrus hystrix DC. RUTACEAE Papeda donor id: CRC 2454. origin: UNKNOWN. local name:
 Mauritius papeda. remarks: This and CRC No. 3103 very similar but not alike. Matures earlier and is full of seed. Tree. Plant.
- PI 539249 Citrus hystrix DC. RUTACEAE Papeda donor id: CRC 3103. origin: UNKNOWN. local name: Mauritius papeda. remarks: Similar to CRC 2454 but matures later and has very few seeds. Tree. Seed.
- PI 539250 Citrus hystrix DC. RUTACEAE Papeda
 donor id: CRC 432. origin: UNKNOWN. cultivar: Cabuyao.
 remarks: Seedling yellows removed by thermotherapy 1985.
 Medium size, very smooth rind, globose to pyriform.
 Yellow at maturity, but many fruits fall when still
 green. Rind medium-thin; seedy; flesh light green to
 yellow-green, ricey, little juice, sour. Very wide
 petiole--like C. ichangensis. Tree. Cultivar. Seed.
- PI 539251 Citrus ichangensis Swingle RUTACEAE Papeda donor id: CRC 2327. origin: UNKNOWN. local name: Ichang papeda. remarks: Exocortis eliminated by shoot tip grafting 1986. Tree. Plant.
- PI 539252 Citrus ichangensis Swingle RUTACEAE Papeda donor id: CRC 2431. origin: UNKNOWN. local name: Ichang papeda. remarks: Exocortis removed by shoot tip grafting 1986. Foliage typical of C. ichangensis. Tree. Plant.
- PI 539253 Citrus ichangensis Swingle RUTACEAE Papeda donor id: CRC 3931. origin: UNKNOWN. local name: Ichang papeda. Tree. Seed.

- PI 539254 Citrus indica T. Tanaka RUTACEAE Mandarin donor id: CRC 3163. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Indian wild orange. remarks: Small orange fruit, sour; rough, medium-thick, bumpy rind. Leaves lanceolate with lined petioles, no wings. Many fruits have prominent, rough lemon-like nose; otherwise, round to slightly flattened at ends. Seeds large. Thick, fleshy membrane walls. Tree. Cutting.
- PI 539255 Citrus intermedia hort. ex T. Tanaka RUTACEAE Sour orange hybrid donor id: CRC 3474. origin: UNKNOWN. pedigree: C. aurantium x ? Open pollinated seedling. local name: Yama mikan. remarks: In Japan: Large fruit, similar to Natsudaidai in size, shape, and color, oblate to slightly oblique shape, stem end flat; slightly bumpy, rind 7-8 mm; hollow center; seedy; acid, low solids, very juicy; leaves large, acuminate tips, petiole average with large wings. Tree. Seed.
- PI 539256 Citrus iyo hort. ex T. Tanaka RUTACEAE Tangor donor id: CRC 3946. origin: UNKNOWN. cultivar: Miyauchi Iyo. local name: Citrus iyo, Iyo, Miyauchi Iyokan. remarks: Tristeza removed by thermotherapy. See The Citrus Industry, Vol 1, p 531; and Citrograph 72(2): 29-30, Dec. 1986: medium-large fruit, very fragrant, easily peeled; early maturing; thin skin; seedless. Tree. Cultivar. Cutting.
- PI 539257 Citrus jambhiri Lush. RUTACEAE Rough lemon donor id: CRC 1222. origin: UNKNOWN. cultivar: Mazoe. pedigree: Open pollinated seedling. local name: Mazoe lemon. remarks: The Citrus Industry states that Mazoe lemon is identical to Florida rough lemon and jamberi lemon of India. Tree. Cultivar. Seed.
- PI 539258 Citrus jambhiri Lush. RUTACEAE Rough lemon donor id: CRC 2325. origin: UNKNOWN. cultivar: South African. local name: South African Rough Lemon. Tree. Cultivar. Cutting.
- PI 539259 Citrus jambhiri Lush. RUTACEAE Rough lemon donor id: CRC 3060. origin: UNKNOWN. pedigree: Open pollinated seedling. remarks: Typical rough lemon. Tree. Seed.

- PI 539260 Citrus jambhiri Lush. RUTACEAE Rough lemon donor id: CRC 3063. origin: UNKNOWN. cultivar:
 Jullundri Khatti. pedigree: Open pollinated seedling. remarks: Smooth, yellow skin; very acid, lemon-lime flavor; seedy, white flesh. Smoother-than-usual rough lemon. Tree not as vigorous growing as most rough lemons. Tree. Cultivar. Seed.
- PI 539261 Citrus jambhiri Lush. RUTACEAE Rough lemon donor id: CRC 3185. origin: UNKNOWN. cultivar: Stow Red. remarks: Seedling yellows removed by thermotherapy 1986. Rind and flesh orange. Internal cross-section similar to Rangpur in texture and color. Tree. Cultivar. Cutting.
- PI 539262 Citrus jambhiri Lush. RUTACEAE Rough lemon donor id: CRC 3385. origin: UNKNOWN. cultivar: Florida "A". pedigree: Open pollinated seedling. local name: Florida rough lemon. Tree. Cultivar. Seed.
- PI 539263 Citrus jambhiri Lush. RUTACEAE Rough lemon donor id: CRC 3386. origin: UNKNOWN. cultivar: Estes. pedigree: Open pollinated seedling. local name: Estes rough lemon. remarks: Typical rough lemon fruit. Tree. Cultivar. Seed.
- PI 539264 Citrus jambhiri Lush. RUTACEAE Rough lemon donor id: CRC 3396. origin: UNKNOWN. cultivar: Milam. pedigree: Open pollinated seedling. local name: Milam rough lemon. remarks: Fruit larger, darker orange, smoother than most rough lemons. Internally similar to rough lemon but smaller, more solid core and darker yellow flesh. Tree. Cultivar. Seed.
- PI 539265 Citrus jambhiri Lush. RUTACEAE Rough lemon donor id: CRC 3834. origin: UNKNOWN. cultivar:
 Limoneira. pedigree: Open pollinated seedling. local name: Limoneira rough lemon. remarks: Typical rough lemon. Tree. Cultivar. Cutting.
- PI 539266 Citrus jambhiri Lush. RUTACEAE Rough lemon donor id: CRC 3879. origin: UNKNOWN. cultivar: Schaub. local name: Schaud rough lemon. remarks: Typical rough lemon fruit. Tree. Cultivar. Cutting.
- PI 539267 Citrus jambhiri Lush. RUTACEAE Rough lemon donor id: CRC 3996. origin: UNKNOWN. cultivar:

 Vangasay. local name: Vangasay rough lemon. remarks:
 Said to be somewhat Phytophthora resistant. Tree.
 Cultivar. Cutting.

- PI 539268 Citrus jambhiri Lush. RUTACEAE Rough lemon donor id: CRC 400. origin: UNKNOWN. cultivar: Florida. pedigree: Open pollinated seedling. remarks: Typical rough lemon. Tree. Cultivar. Seed.
- PI 539269 Citrus keraji hort. ex T. Tanaka RUTACEAE Mandarin donor id: CRC 3144. origin: UNKNOWN. local name: Keraji. remarks: Small to medium-sized mandarin, very puffy, sweet. Tree. Seed.
- PI 539270 Citrus kinokuni hort. ex T. Tanaka RUTACEAE Mandarin donor id: CRC 696. origin: UNKNOWN. cultivar: Kinokuni. pedigree: Open pollinated seedling. remarks: Small, oblate mandarin, imported from China, of excellent quality. Identified as Kinokuni mandarin by Dr. Tanaka here in 1928. Very small fruit, light orange rind color. Tree. Cultivar. Seed.
- PI 539271 Citrus latifolia (Yuich. Tanaka) T. Tanaka RUTACEAE Lime donor id: CRC 2315. origin: UNKNOWN. cultivar: Page. local name: Tahiti. remarks: Typical Bearss lime in fruit and tree character. Tree. Cultivar. Cutting.
- PI 539272 Citrus latifolia (Yuich. Tanaka) T. Tanaka RUTACEAE Lime donor id: CRC 3772. origin: UNKNOWN. cultivar: Bearss. local name: Tahitian, Persian. remarks: Origin: Hayes Ranch, Indio, California. Shoot tip grafting and thermotherapy were ineffective in removing wood pocket 1986. See The Citrus Industry, Vol 1, pp 577-578. Tree. Cultivar. Cutting.
- PI 539273 Citrus latifolia (Yuich. Tanaka) T. Tanaka RUTACEAE Lime donor id: CRC 391. origin: UNKNOWN. cultivar: Tahiti. local name: Tahiti lime. remarks: Exocortis removed by shoot tip grafting 1985. Fruit seems identical to CRC Nos. 450, 2315, and 3772. Tree. Cultivar. Cutting.
- PI 539274 Citrus latifolia (Yuich. Tanaka) T. Tanaka RUTACEAE Lime donor id: CRC 449. origin: UNKNOWN. cultivar: Ponds. pedigree: Open pollinated seedling. local name: Ponds seedless lime. remarks: Best lime in Hawaii. Good size, smooth skin, fine quality; spreading tree with characteristic recurved branches. Seedling yellows removed by thermotherapy 1985. Compared with other Persian limes, some rougher larger fruit but probably basically the same. Tree. Cultivar. Cutting.

- PI 539275 Citrus latifolia (Yuich. Tanaka) T. Tanaka RUTACEAE Lime donor id: CRC 450. origin: UNKNOWN. cultivar: Wilder. local name: Wilder seedless. remarks: Exocortis removed by shoot tip grafting 1985. Fruit seems identical to CRC 391, 2315, and 3772; probably identical to CRC 449 (Ponds), but 449 rougher. Tree. Cultivar. Cutting.
- PI 539276 Citrus leiocarpa hort. ex T. Tanaka RUTACEAE Mandarin donor id: CRC 3147. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Koji orange. remarks: Small, sour mandarin. Tree. Seed.
- PI 539277 Citrus limetta Risso RUTACEAE Sweet lemon donor id: CRC 3051. origin: UNKNOWN. cultivar:
 Mitha-Tulia. local name: mitha nimbu, limun helou.
 remarks: Seedling yellows removed by thermotherapy 1986.
 Tree. Cultivar. Seed.
- PI 539278 Citrus limetta Risso RUTACEAE Sweet lemon donor id: CRC 3093. origin: UNKNOWN. remarks: Larger, more attractive fruit than Millsweet; no prominent nose; rind smooth, thin; flesh light yellow, juicy; moderately seedy; very bland. Tree. Seed.
- PI 539279 Citrus limetta Risso RUTACEAE Sweet lemon donor id: CRC 3776. origin: UNKNOWN. cultivar: Bakrai. local name: Bakrai acidless lime. remarks: Used as rootstock in Iran; fruit sold commercially. Fruit much different in California from Palestine Sweet lime and other similar clones: rougher, thicker rind, like rough lemon; flavor about same as Palestine but darker flesh, yellow to almost orange-yellow; may be seedier. Tree. Cultivar. Seed.
- PI 539280 Citrus limetta Risso RUTACEAE Sweet lemon donor id: CRC 3989. origin: UNKNOWN. cultivar: Limonette de Marrakech. local name: Marrakech Limonette. remarks: See The Citrus Industry, Vol 1, pp 572-573. Tree. Cultivar. Cutting.
- PI 539281 Citrus limetta Risso RUTACEAE Sweet lemon donor id: CRC 569. origin: UNKNOWN. cultivar:
 Millsweet. remarks: Exocortis removed by shoot tip grafting 1985. Moderately smooth rind; shape and size of a rough lemon, pronounced nose on most fruits; lemon-like interior, seeds few and small; not totally accidless, slightly tart. See CRC 3093. Tree. Cultivar. Cutting.

- PI 539282 Citrus limetta Risso RUTACEAE Sweet lime
 donor id: CRC 2484. origin: UNKNOWN. cultivar: Sniff.
 local name: Sniff sweet red. remarks: Seedling yellows
 removed by thermotherapy 1985. This and CRC 1684 and 2709
 very similar; considerable individual fruit variation.
 Fruit appearance much like Rangpur lime but very sweet,
 virtually acidless. Tree. Cultivar. Cutting.
- PI 539283 Citrus limettioides T. Tanaka RUTACEAE Sweet lime donor id: CRC 1482. origin: UNKNOWN. cultivar:
 Palestine. local name: Indian (Palestine) sweet lime.
 remarks: CRC 363, 919, and 921 very closely resemble each other in fruit characteristics. Tree. Cultivar.
 Cutting.
- PI 539284 Citrus limettioides T. Tanaka RUTACEAE Sweet lime donor id: CRC 1684. origin: UNKNOWN. cultivar: Weirick. local name: Weirick sweet red. remarks: Seedling yellows removed by shoot tip grafting 1985. This and CRC 2484 and 2709 very similar; considerable individual fruit variation. Fruit much like Rangpur lime but very sweet, virtually acidless. Tree. Cultivar. Cutting.
- PI 539285 Citrus limettioides T. Tanaka RUTACEAE Sweet lime donor id: CRC 363. origin: UNKNOWN. local name: unnamed. remarks: Closely resembles CRC 919, CRC 1482, and CRC 921 in fruit characteristics. Tree. Cutting.
- PI 539286 Citrus limettioides T. Tanaka RUTACEAE Sweet lime donor id: CRC 919. origin: UNKNOWN. local name: sweet lime. Tree. Cutting.
- PI 539287 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 2323. origin: UNKNOWN. cultivar: India. local name: C. volckameriana?. remarks: Similar to C. volckameriana. Exocortis removed by shoot tip grafting 1986. Tree. Cultivar. Cutting.
- PI 539288 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 2477. origin: UNKNOWN. cultivar: Khoubs-el-arsa. Tree. Cultivar. Seed.

- PI 539289 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 2489. origin: UNKNOWN. cultivar: Khoubs-el-arsa. pedigree: Open pollinated seedling. remarks: Exocortis removed by shoot tip grafting 1986. Large to very large lemon-like fruit, many as large as medium-sized pummelo. Dark yellow rind; large fruits as rough as rough lemon. Fruit round but flattened at both ends, somewhat like the shape of a Willowleaf mandarin. Depressed apex surrounded by depressed ring. Thick rind; large yellow core; seedy; flesh medium yellow; juicy, sour. Tree. Cultivar. Seed.
- PI 539290 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 2544. origin: UNKNOWN. cultivar: Indian. pedigree: Open pollinated seedling. remarks: Smaller fruit than other rough lemons, but otherwise typical. Tree. Cultivar. Seed.
- PI 539291 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 2705. origin: UNKNOWN. cultivar: Variegated. Tree. Cultivar. Cutting.
- PI 539292 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 280. origin: UNKNOWN. cultivar: Villafranca. remarks: Exocortis removed by shoot tip grafting 1985. Market type lemon. Tree. Cultivar. Cutting.
- PI 539293 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 3009. origin: UNKNOWN. cultivar: Messina. remarks: Exocortis removed by shoot tip grafting 1986.

 Tree. Cultivar. Cutting.
- PI 539294 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 3045. origin: UNKNOWN. cultivar: Kulu. local name: Gombru. remarks: Exocortis removed by shoot tip grafting 1986. Foliage generally lemon-like but with appearance of Yuma Ponderose lemon or Cuban Shaddock in some vigorous shoots. Fruit medium-large, oval with nose; yellow rind, moderately smooth, no persistent styles. Interior like lemon but flesh very pale yellow and coarse appearing, seedy. Rind thickness about like a lemon. Tree. Cultivar. Seed.
- PI 539295 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 3162. origin: UNKNOWN. cultivar: Iran. local name: Iran lemon. remarks: Leaves broad, blunt-tipped, slightly winged petiole; fruit large, yellow, round; very thick rind; seedy; amber flesh; hollow core; sour. Tree. Cultivar. Cutting.

- PI 539296 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 3261. origin: UNKNOWN. cultivar: Soh synteng. pedigree: Open pollinated seedling. remarks: Polyembryonic; large, round lemon; flavor not typically lemon. Tree. Cultivar. Seed.
- PI 539297 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 3265. origin: UNKNOWN. cultivar: Bitrouni. pedigree: Open pollinated seedling. local name: Bitrouni lemon. remarks: From Iran. Large fruit; slightly rough with large calyx; very acid, edible as substitute for lemon; flesh yellow/light amber; rough, ribbed; foliage lemon-like but moderately winged petiole; thick rind; none to many many. Tree. Cultivar. Seed.
- PI 539298 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 3387. origin: UNKNOWN. cultivar: Arancino. pedigree: Open pollinated seedling. local name: Arancino, Cucuzzaru. remarks: See The Citrus Industry, Vol 1, p 566. Market type lemon. Tree. Cultivar. Seed.
- PI 539299 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 3388. origin: UNKNOWN. cultivar: Femminello Ovale. pedigree: Open pollinated seedling. local name: Femminello Ovale, Comune, Ruvittaru. remarks: See The Citrus Industry, Vol 1, pp 562-563. Market type lemon. Tree. Cultivar. Seed.
- PI 539300 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 3389. origin: UNKNOWN. cultivar: Femminello Sfusato. pedigree: Open pollinated seedling. local name: Favazzina, Siracusa. remarks: Described in The Citrus Industry, Vol 1, p 563. Tree. Cultivar. Seed.
- PI 539301 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 3390. origin: UNKNOWN. cultivar: Lo Porto. pedigree: Open pollinated seedling. remarks: See The Citrus Industry, Vol 1, p 567. Market type lemon; fleshy calyx. Tree. Cultivar. Seed.
- PI 539302 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 3392. origin: UNKNOWN. cultivar:

 Monachello. pedigree: Open pollinated seedling. local name: Monachello, Moscatello. remarks: See The Citrus Industry, Vol 1, p 565. Tree. Cultivar. Seed.

- PI 539303 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 3491. origin: UNKNOWN. cultivar: Primofiore. pedigree: Open pollinated seedling. local name: Primofiore, Mesero, Fino. remarks: Primofiori listed as synonym for Mesero lemon in The Citrus Industry, Vol 1, p 565. Market type lemon; large fruit. Tree. Cultivar. Cutting.
- PI 539304 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 3496. origin: UNKNOWN. cultivar: Allen-Newman #4. pedigree: Open pollinated seedling. local name: Allen-Newman #4 Eureka. Tree. Cultivar. Cutting.
- PI 539305 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 3501. origin: UNKNOWN. cultivar: Limoneira Olivelands 8-A. local name: Limoneira Olivelands lemon. Tree. Cultivar. Cutting.
- PI 539306 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 3504. origin: UNKNOWN. cultivar: Dr. Strong #28. pedigree: Open pollinated seedling. local name: Dr. Strong Lisbon lemon. Tree. Cultivar. Cutting.
- PI 539307 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 3590. origin: UNKNOWN. cultivar: Berna. pedigree: Open pollinated seedling. local name: Berna lemon. remarks: Originally from Spain. See The Citrus Industry, Vol 1, p 561. Market-type lemon; large fruit. Tree. Cultivar. Cutting.
- PI 539308 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 3591. origin: UNKNOWN. cultivar: Corpaci. pedigree: Open pollinated seedling. local name: Corpaci lemon. remarks: Market-type lemon. See The Citrus Industry, Vol 1, p 566. Tree. Cultivar. Cutting.
- PI 539309 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 390. origin: UNKNOWN. cultivar: Villafranca. remarks: Psorosis and exocortis removed by shoot tip grafting 1985. Buds from tree with yield of 1250 lbs/year. Tree. Cultivar. Cutting.
- PI 539310 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 3925. origin: UNKNOWN. cultivar: Lumia. local name: Lumia lemon. remarks: Exocortis and psorosis removed by shoot tip grafting. Acidless. Tree. Cultivar. Cutting.

- PI 539311 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 3970. origin: UNKNOWN. cultivar: Limonero Fino. local name: Limonero Fino lemon. remarks: Shoot tip grafted. See The Citrus Industry, Vol 1, p 565. Tree. Cultivar. Cutting.
- PI 539312 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 4005. origin: UNKNOWN. cultivar: Lapithiotiki. local name: "Lapithiotiki" lemon. Tree. Cultivar. Cutting.
- PI 539313 Citrus limon (L.) Burm. f. RUTACEAE Lemon donor id: CRC 565. origin: UNKNOWN. cultivar: Genoa. remarks: Exocortis removed by shoot tip grafting 1985. Citrus Industry, Vol. 1, p 567: Genoa is a California variety which Webber (1943) says is of the Eureka type and difficult to distinguish from it. Tree. Cultivar. Cutting.
- PI 539314 Citrus limon (L.) Burm. f. RUTACEAE Lemon hybrid donor id: CRC 3492. origin: UNKNOWN. cultivar: Iraq. pedigree: Open pollinated seedling. remarks: Fruit similar to Palestine sweet lime (CRC 1482) but larger and more elongate; coarser and lighter colored flesh than Palestine sweet lime, but lack of acidity and flavor similar. Tree. Cultivar. Seed.
- PI 539315 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Eureka donor id: CRC 2367. origin: UNKNOWN. cultivar:
 Variegated Pink. local name: Variegated pink fleshed Eureka. remarks: Eureka lemon variegated sport with pink flesh and pink juice. Exocortis removed by shoot tip grafting 1986. Interesting ornamental. Variegation fades as fruit matures but still present on ripe fruit. Light pink flesh. Tree. Cultivar. Cutting.
- PI 539316 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Eureka donor id: CRC 2429. origin: UNKNOWN. cultivar: Amber. remarks: Flesh and juice amber or orange, strikingly different from ordinary lemons; flowers white; mild taste. Exocortis removed by shoot tip grafting 1986. Tree. Cultivar. Cutting.
- PI 539317 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Eureka donor id: CRC 2703. origin: UNKNOWN. cultivar: Cascade Eureka. local name: Cascade. remarks: Exocortis removed by shoot tip grafting 1986. Tree. Cultivar. Cutting.
- PI 539318 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Eureka donor id: CRC 3005-II. origin: UNKNOWN. cultivar: Frost Eureka. Tree. Cultivar.

- PI 539319 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Eureka
 donor id: CRC 3007. origin: UNKNOWN. cultivar: Allen
 Variegated. local name: Sloop Eureka. remarks:
 Exocortis removed by shoot tip grafting 1986. Attractive
 variegation, several shades of green and yellow-green; no
 white foliage; variegation almost entirely in foliage:
 fruits show little and mature fruit look like ordinary
 market lemon. Tree. Cultivar. Cutting.
- PI 539320 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Eureka
 donor id: CRC 3043. origin: UNKNOWN. cultivar: Corona
 Foothill. local name: Corona Foothill old budline.
 remarks: Exocortis removed by shoot tip grafting 1986.
 Market-type lemon, large fruit. Tree. Cultivar.
 Cutting.
- PI 539321 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Eureka donor id: CRC 3498. origin: UNKNOWN. cultivar: Cascade #1. pedigree: Open pollinated seedling. local name: Cascade Eureka. Tree. Cultivar. Cutting.
- PI 539322 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Eureka donor id: CRC 3499. origin: UNKNOWN. cultivar: Blanchard. pedigree: Open pollinated seedling. local name: Blanchard Eureka. Tree. Cultivar. Cutting.
- PI 539323 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Eureka donor id: CRC 3837. origin: UNKNOWN. cultivar: Cook Eureka. pedigree: Open pollinated seedling. local name: Cook Eureka lemon. Tree. Cultivar. Cutting.
- PI 539324 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Eureka donor id: CRC 3838. origin: UNKNOWN. cultivar: Ross Eureka. pedigree: Open pollinated seedling. local name: Ross Eureka lemon. Tree. Cultivar. Cutting.
- PI 539325 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Eureka donor id: CRC 599. origin: UNKNOWN. cultivar: Eureka Variegated. local name: Variegated Eureka. remarks: Exocortis removed by shoot tip grafting 1985. Foliage and young fruit attractively variegated, but fruit variegation fades with maturity; mature fruit can look like ordinary Eureka. Tree. Cultivar. Cutting.
- PI 539326 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Lisbon donor id: CRC 3010. origin: UNKNOWN. cultivar: Kaweah #1. local name: Kaweah. remarks: Exocortis removed by shoot tip grafting 1986. Tree. Cultivar. Cutting.

- PI 539327 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Lisbon donor id: CRC 3013. origin: UNKNOWN. cultivar: Lupe Lisbon. pedigree: Open pollinated seedling. local name: Lupe. remarks: More like a Lisbon than a Eureka. Tree. Cultivar. Seed.
- PI 539328 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Lisbon donor id: CRC 3176. origin: UNKNOWN. cultivar: Frost Lisbon. local name: Frost nucellar Lisbon. Tree. Cultivar. Seed.
- PI 539329 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Lisbon donor id: CRC 3500. origin: UNKNOWN. cultivar: Femminello. pedigree: Open pollinated seedling. Tree. Cultivar. Cutting.
- PI 539330 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Lisbon donor id: CRC 3505. origin: UNKNOWN. cultivar: Prior. pedigree: Open pollinated seedling. local name: Prior Lisbon lemon. Tree. Cultivar. Cutting.
- PI 539331 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Lisbon donor id: CRC 3835. origin: UNKNOWN. cultivar: Galligan Lisbon. pedigree: Open pollinated seedling. local name: Galligan Lisbon lemon. Tree. Cultivar. Cutting.
- PI 539332 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Lisbon donor id: CRC 3836. origin: UNKNOWN. cultivar: Foothill Lisbon. pedigree: Open pollinated seedling. Tree. Cultivar. Cutting.
- PI 539333 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Lisbon donor id: CRC 3839. origin: UNKNOWN. cultivar: Monroe Lisbon. pedigree: Open pollinated seedling. local name: Monroe Lisbon lemon. Tree. Cultivar. Cutting.
- PI 539334 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Lisbon donor id: CRC 3840. origin: UNKNOWN. cultivar:
 Rosenberger. local name: Rosenberger Lisbon old budline. remarks: Exocortis removed by thermotherapy. Tree. Cultivar. Cutting.
- PI 539335 Citrus limonia Osbeck RUTACEAE Lemon hybrid donor id: CRC 3050. origin: UNKNOWN. cultivar: C. volckameriana. local name: Volckamer lemon. remarks: Moderately large, oval, seedy lemon, not as elongate as most lemons, no nose. Flavor lemon-like. Rind dark yellow to almost orange-yellow. Tree. Cultivar. Seed.
- PI 539336 Citrus limonia Osbeck RUTACEAE Mandarin hybrid donor id: CRC 3919. origin: UNKNOWN. local name: Rangpur lime. Tree. Seed.

- PI 539337 Citrus limonia Osbeck RUTACEAE Mandarin hybrid donor id: CRC 3920. origin: UNKNOWN. local name: Rangpur lime. Tree. Seed.
- PI 539338 Citrus limonia Osbeck RUTACEAE Mandarin hybrid-Rangpur donor id: CRC 131. origin: UNKNOWN. cultivar: Santa Barbara. pedigree: C. reticulata var. austera x ?. local name: Santa Barbara Rangpur. remarks: Exocortis removed by shoot tip grafting 1985. Typical Rangpur lime. This accession and CRC 712, 2318, 2319, 2424, 2451, and 2875 very similar. Tree. Cultivar. Cutting.
- PI 539339 Citrus limonia Osbeck RUTACEAE Mandarin hybrid-Rangpur donor id: CRC 2318. origin: UNKNOWN. cultivar:
 Phillipine. pedigree: C. reticulata var. austera x ?.
 local name: Philippine Red Lime. remarks: Psorosis removed by thermotherapy 1985. This and CRC Nos. 131, 712, 2319, 2424, 2451, and 2875 very similar. Tree. Cultivar. Cutting.
- PI 539340 Citrus limonia Osbeck RUTACEAE Mandarin hybrid-Rangpur donor id: CRC 2319. origin: UNKNOWN. cultivar:
 Australian Red. pedigree: C. reticulata var. austera x
 ?. local name: Australian Red Rangpur. remarks:
 Exocortis removed by shoot tip grafting 1985. This and CRC Nos. 131, 712, 2318, 2424, 2451, and 2875 very similar. Tree. Cultivar. Cutting.
- PI 539341 Citrus limonia Osbeck RUTACEAE Mandarin hybrid-Rangpur donor id: CRC 2424. origin: UNKNOWN. cultivar: Borneo Rangpur. pedigree: C. reticulata var. austera x ?. remarks: Exocortis removed by shoot tip grafting 1986. This and CRC Nos. 131, 712, 2318, 2319, 2451, and 2875 very similar. Tree. Cultivar. Plant.
- PI 539342 Citrus limonia Osbeck RUTACEAE Mandarin hybrid-Rangpur donor id: CRC 2451. origin: UNKNOWN. cultivar: Bishop Red. pedigree: C. reticulata var. austera x ?. local name: Bishop Red. remarks: Exocortis removed by shoot tip grafting 1985. This and CRC Nos. 131, 712, 2318, 2319, 2424, and 2875 very similar. Tree. Cultivar. Cutting.
- PI 539343 Citrus limonia Osbeck RUTACEAE Mandarin hybrid-Rangpur donor id: CRC 2709. origin: UNKNOWN. cultivar:
 Otaheite. pedigree: C. reticulata var. austera x ?.
 local name: Otaheite Rangpur. remarks: Seedling yellows removed by thermotherapy 1986. This and CRC Nos. 1684 and 2484 very similar, but considerable individual fruit variation. Fruit appearance much like Rangpur lime, but very sweet, virtually acidless. Tree. Cultivar. Cutting.

- PI 539344 Citrus limonia Osbeck RUTACEAE Mandarin hybrid-Rangpur donor id: CRC 3932. origin: UNKNOWN. received as: Citrus limonia var. hangleson. Tree. Seed.
- PI 539345 Citrus limonia Osbeck RUTACEAE Mandarin hybrid-Rangpur donor id: CRC 452. origin: UNKNOWN. cultivar: Kusaie. pedigree: C. reticulata var. austera x ?. local name: Kusaie Rangpur. remarks: Seedling yellows removed by thermotherapy 1985. Yellow rind and flesh; otherwise identical to Rangpur. Tree. Cultivar. Cutting.
- PI 539346 Citrus longispina Wester RUTACEAE Lime
 donor id: CRC 2320. origin: UNKNOWN. cultivar: Winged
 Lime. local name: Talamisan, Winged Lime. remarks: Very
 compact tree, small leaves, short internodes; thorns few
 and short; fruit small, size of small market mandarin,
 round, bright yellow, slightly rough, rind medium-thin,
 moderately seedy, flesh yellow, acrid flavor. Tree.
 Cultivar. Cutting.
- PI 539347 Citrus lycopersiciformis (Lush.) hort. ex T. Tanaka
 RUTACEAE Mandarin
 donor id: CRC 3564. origin: UNKNOWN. local name: Monkey
 orange, Kokni ou Kodakithuli. remarks: See The Citrus
 Industry, Vol 1, p 525. Small, moderately sour mandarin.
 Tree. Seed.
- PI 539348 Citrus maderaspatana hort. ex T. Tanaka RUTACEAE Sour orange hybrid donor id: CRC 3225. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Kichilli. remarks: Compact tree; wide leaf, wide petiole; fruit round, size of small orange, medium orange color; very rough, bumpy, loose, puffy rind; fairly seedy; flesh orange, coarse, not juicy; flavor sub-acid. Tree. Cutting.
- PI 539349 Citrus madurensis Lour. RUTACEAE Calamondin donor id: CRC 2592. origin: UNKNOWN. cultivar: Calamondin. pedigree: C. reticulata x Fortunella sp. (unknown cultivars). local name: Calamondin (Chi Chieh). Tree. Cultivar.
- PI 539350 Citrus madurensis Lour. RUTACEAE Calamondin donor id: CRC 3087. origin: UNKNOWN. cultivar: Variegated Calamondin. pedigree: C. reticulata x Fortunella sp. (unknown cultivars). remarks: Fruit smaller, lighter in color when mature than calamondin, variegated only when immature. Attractive light green and variegated foliage. Tree. Cultivar. Cutting.

- PI 539351 Citrus madurensis Lour. RUTACEAE Calamondin donor id: CRC 3656. origin: UNKNOWN. cultivar: Calamondin sport. pedigree: C. reticulata x Fortunella sp. (unknown cultivars). local name: Calamondin. remarks: Not as attractive as calamondin; fruit less numerous, lighter colored, smaller. Tree. Cultivar. Cutting.
- PI 539352 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 1208. origin: UNKNOWN. cultivar:
 Roeding's pink. remarks: Psorosis and exocortis removed by shoot tip grafting 1985. Medium to large pummelo; rind lemon yellow, smooth, medium-thick; very seedy; flesh light greenish-yellow with very slight pink tinge; flavor fair. Tree. Cultivar. Cutting.
- PI 539353 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 1225. origin: UNKNOWN. cultivar: Hunnan. pedigree: Open pollinated seedling. remarks: Large pyriform, yellow, fairly smooth, medium-thick rind; very seedy; coarse white flesh; sour and bitter. Tree. Cultivar. Seed.
- PI 539354 Citrus maxima (Burman) Merr. RUTACEAE Pummelo
 donor id: CRC 2236. origin: UNKNOWN. cultivar:
 Sunshine. remarks: Flat oval shape, heavy crop. Green
 flesh, seedy. Very peculiar taste; sour but good. Medium,
 light yellow rind; medium-large fruit; slight pink tinge
 in albedo and central core. Tree. Cultivar. Cutting.
- PI 539355 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2240. origin: UNKNOWN. cultivar: Siamese Acidless. local name: Siamese Sweet. remarks: Parent of Melogold and Oroblanco; seed parent of Chandler. Fruit matches description in Citrus Industry (Vol 1, p 539) well. Tree. Cultivar. Plant.
- PI 539356 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2241. origin: UNKNOWN. cultivar: Kao Pan. local name: Siam, Kao Panne. remarks: Heavy crop, round fruit, medium peel; seedy; good taste, ricey, dark pink flesh; fair flavor, attractive interior. Tree. Cultivar. Plant.
- PI 539357 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2242. origin: UNKNOWN. cultivar: Kao Pan. local name: Kao Panne. Tree. Cultivar. Cutting.
- PI 539358 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2243. origin: UNKNOWN. cultivar: Kao Pan. local name: Kao Panne. remarks: Fair flavor, green flesh. Tree. Cultivar. Cutting.

- PI 539359 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2244. origin: UNKNOWN. cultivar: Pink. local name: Java Pink. remarks: Smooth fruit, obovate with thick peel, moderate seed; good taste, tart; flesh greenish-yellow with definite pink tinge; rind only medium-thick. Tree. Cultivar. Cutting.
- PI 539360 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2245. origin: UNKNOWN. cultivar: Red. local name: Java Red. remarks: Oval shape; medium rind; very seedy, pink-streaked flesh, sour; medium to large size. Tree. Cultivar. Cutting.
- PI 539361 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2246. origin: UNKNOWN. cultivar: Pink. remarks: Smooth, ovate, thick rind; seedy, light pink, good flavor; medium size. Tree. Cultivar. Cutting.
- PI 539362 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2248. origin: UNKNOWN. cultivar: Kao Panne. local name: Kao Pan. remarks: Flesh dry, ricey, not edible. Tree. Cultivar. Cutting.
- PI 539363 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2249. origin: UNKNOWN. cultivar: Kao Panne. local name: Kao Pan. remarks: Psorosis removed by shoot tip grafting 1985. Sour greenish flesh. Tree. Cultivar. Cutting.
- PI 539364 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2338. origin: UNKNOWN. local name: Red Fleshed. remarks: Cupped leaves. Small fruit for pummelo; rind smooth, yellow, medium-thick; red flesh, ricey appearance; moderately seedy, sour. Tree. Cutting.
- PI 539365 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2340. origin: UNKNOWN. remarks: Large fruit, elliptical shape, very thick rind, seedy, white flesh, good flavor, sweet, tastes like watermelon; wavy leaves, unusual foliage for a pummelo. Tree. Cutting.
- PI 539366 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2341. origin: UNKNOWN. cultivar: Karn Lau Yau. remarks: Heavy crop. Round; white flesh; very seedy; sweet, good flavor, at peak. Tree. Cultivar. Cutting.

- PI 539367 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2342. origin: UNKNOWN. cultivar: Pong Yau. remarks: Heavy crop. Pear shape; medium rind; white flesh; seedy; good taste, acid. Exocortis removed by shoot tip grafting 1985. Tree. Cultivar. Cutting.
- PI 539368 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2343. origin: UNKNOWN. cultivar: Philippine. remarks: Leaves like sweet orange; grapefruit-size fruit, deep yellow to yellow-orange rind of medium thickness, yellow flesh, hollow center, moderately seedy, sour; heavy crop 1988. Tree. Cultivar. Cutting.
- PI 539369 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2346. origin: UNKNOWN. cultivar: African. remarks: Dwarf trees; round fruit, medium rind, very seedy, white flesh with slightly pink tinge, insipid, flat. Tree. Cultivar. Cutting.
- PI 539370 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2347. origin: UNKNOWN. cultivar: Deep Red. remarks: Pear shape; heavy crop; seedy; outstanding flavor; large fruit, juicier than most pummelos; flesh pink, especially near carpel walls. Tree. Cultivar. Cutting.
- PI 539371 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2348. origin: UNKNOWN. cultivar: Pin Shan Kong Yau. remarks: Good crop; round; thick rind; white flesh, seedy, sweet, not much juice. Tree. Cultivar. Cutting.
- PI 539372 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2349. origin: UNKNOWN. cultivar: Kao Panne. local name: Kao Pan. remarks: Thick rind; sour. Tree. Cultivar. Plant.
- PI 539373 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2350. origin: UNKNOWN. cultivar: Kao Ruan Tia. remarks: Rind fairly smooth, moderately thick, pale yellow; broadly pyriform, medium-large; greenish-yellow flesh, juicy, good flavor, very seedy. Tree. Cultivar. Cutting.
- PI 539374 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2351. origin: UNKNOWN. cultivar: Kao Ruan Tia. remarks: Large globose fruit, medium to light yellow, fairly smooth, thick rind, greenish-yellow flesh, flavor fair but tart, very seedy. Tree. Cultivar. Cutting.

- PI 539375 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2352. origin: UNKNOWN. cultivar: Kao Phuang. remarks: Dwarf tree, pear-shaped fruit, heavy crop, medium peel, seedy, white-fleshed, acid. Tree. Cultivar. Cutting.
- PI 539376 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2353. origin: UNKNOWN. cultivar: Nakhon Chaisi. remarks: Light crop; almost round; medium rind; ricey flesh, good taste. Tree. Cultivar. Cutting.
- PI 539377 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2355. origin: UNKNOWN. cultivar: Kao Panne. local name: Kao Pan. remarks: Pink-orange tinge in flesh, bitter flavor. Tree. Cultivar. Cutting.
- PI 539378 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2356. origin: UNKNOWN. cultivar: Kao Panne. local name: Kao Pan. remarks: Tart but edible. Fits Citrus Industry description (Vol 1, pp 536-537) fairly well. Tree. Cultivar. Cutting.
- PI 539379 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2421. origin: UNKNOWN. cultivar: Siamese. remarks: Very small trees, heavy crop; pear-shaped with slight neck; seedy, green flesh, medium rind; surface bumpy, not smooth; sour. Tree. Cultivar. Cutting.
- PI 539380 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2453. origin: UNKNOWN. remarks: Medium to large; deep yellow color; slightly rough, thick rind; flesh pink, ricey texture; flavor sour with bitter aftertaste; seedy. Tree. Plant.
- PI 539381 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2487. origin: UNKNOWN. cultivar: Alemoen. pedigree: Open pollinated seedling. remarks: Medium-size fruit; rind nearly white, moderately thick; flesh pale pink; sour. Tree. Cultivar. Seed.
- PI 539382 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2583. origin: UNKNOWN. cultivar: Tau Yau. remarks: Medium-sized, globose; pale yellow, moderately smooth, moderately thick rind; large pithy core; flesh greenish-yellow; flavor fair to good, slightly tart; extremely seedy. Tree. Cultivar. Cutting.
- PI 539383 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2596. origin: UNKNOWN. cultivar: Arajon. remarks: Blood-red shaddock with thornless tree. Exocortis removed by shoot tip grafting 1985. Tree. Cultivar. Cutting.

- PI 539384 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2608. origin: UNKNOWN. cultivar: Red Aranyan. remarks: Medium-small, globose; rind yellow, medium-thick; pithy core; pink/red, coarse flesh, seedy, sour; low juice content. Tree. Cultivar. Cutting.
- PI 539385 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 2752. origin: UNKNOWN. cultivar: Pan Dan. remarks: Medium size, round to slightly oval; yellow, slightly rough, thick rind; seedy; flesh white with very slight pink tinge in outer edge of segments and in albedo; flavor fair to good, but tart. Tree. Cultivar.
- PI 539386 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 302. origin: UNKNOWN. cultivar: Tresca. local name: Tresca. remarks: Exocortis removed by shoot tip grafting 1985. Tree. Cultivar. Cutting.
- PI 539387 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3066. origin: UNKNOWN. cultivar: Sour. pedigree: Open pollinated seedling. remarks:

 Medium-large, flattened both ends, about shape of Encore mandarin; rind light yellow, medium thickness; large, pithy central core; greenish flesh, very seedy, flavor sour but not excessively. Tree. Cultivar. Seed.
- PI 539388 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3067. origin: UNKNOWN. cultivar: Sweet. pedigree: Open pollinated seedling. remarks: White next to core, pink next to rind; very sour. Large, round, medium-yellow color; thick rind, hollow core; very seedy; flesh ricey. Tree. Cultivar. Seed.
- PI 539389 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3244. origin: UNKNOWN. cultivar: Chandler. pedigree: C. maxima 'Siamese Pink' x C. maxima 'Siamese Sweet'. Tree. Cultivar. Cutting.
- PI 539390 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3282. origin: UNKNOWN. pedigree: Open pollinated seedling. remarks: Psorosis eliminated by thermotherapy 1986. Large, round to slightly pyriform fruit with medium yellow, slightly rough, thick rind; seedy; small, pithy core; flesh light yellow; juicy, good flavor, slightly tart. Tree. Seed.

- PI 539391 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3805. origin: UNKNOWN. cultivar: Reinking. local name: Reinking pummelo. remarks: Medium-large pummelo; yellow, slightly rough, moderately thick rind; fruits flattened on bottom, more bell-shaped than pyriform; small, pithy core; very seedy; flesh light yellow, somewhat ricey but juicy; good flavor, slightly tart. Tree. Cultivar. Cutting.
- PI 539392 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3806. origin: UNKNOWN. cultivar:
 Tahitian. local name: Tahitian pummelo. remarks:
 Thermotherapy when imported. Small trees; rind thinner than most pummelos; fruit small to medium-large; smooth, yellow rind; globose fruits, slightly flattened on ends; seedy; flesh green-amber, melting, juicy; unusual flavor, enjoyed by many, disliked by some. Tree. Cultivar. Cutting.
- PI 539393 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3926. origin: UNKNOWN. cultivar: Kao Phuang. local name: Kao Phuang pummelo. remarks: Exocortis removed by shoot tip grafting. See The Citrus Industry, Vol 1, p 537. Tree. Cultivar. Cutting.
- PI 539394 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3927. origin: UNKNOWN. cultivar: Thong Dee. local name: Thong Dee pummelo. remarks: Exocortis, tristeza, and concave gum removed by shoot tip grafting. See The Citrus Industry, Vol 1, pp 538-9. Tree. Cultivar. Cutting.
- PI 539395 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3928. origin: UNKNOWN. cultivar: Itoshima Bankan. local name: Itoshima Bankan pummelo. Tree. Cultivar. Cutting.
- PI 539396 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3940. origin: UNKNOWN. cultivar: Haiku B. local name: Haiku B pummelo. remarks: Thermotherapy during import processing. Tree. Cultivar. Cutting.
- PI 539397 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3944. origin: UNKNOWN. cultivar: Kawachi-bankan. local name: Kawachi-bankan pummelo. remarks: Thermotherapy during import processing. See Citrograph 72(2): pp 29-30, Dec. 1986: large fruit; mature late. Tree. Cultivar. Cutting.

- PI 539398 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3945. origin: UNKNOWN. cultivar: Mato Buntan. local name: Mato Buntan, Mato pummelo. remarks: Tristeza removed by thermotherapy. See The Citrus Industry, Vol 1, p 537. Tree. Cultivar. Cutting.
- PI 539399 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3947. origin: UNKNOWN. cultivar: Suisho Buntan. local name: Suisho Buntan pummelo. remarks: Exocortis removed by shoot tip grafting. Tree. Cultivar. Cutting.
- PI 539400 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3948. origin: UNKNOWN. cultivar: Kao Pan. local name: Kao Pan pummelo. remarks: Tristeza removed by thermotherapy. See The Citrus Industry, Vol 1, pp 537-538. Tree. Cultivar. Cutting.
- PI 539401 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3949. origin: UNKNOWN. cultivar: Pauthel. local name: Pauthel pummelo. remarks: Thermotherapy during import processing. Tree. Cultivar. Cutting.
- PI 539402 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3950. origin: UNKNOWN. cultivar: Banokan. local name: Banokan pummelo. remarks: Tristeza and exocortis removed by thermotherapy and shoot tip grafting. See The Citrus Industry, Vol 1, p 551. Tree. Cultivar. Cutting.
- PI 539403 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3951. origin: UNKNOWN. cultivar: Hirado Buntan. local name: Hirado pummelo. remarks: See The Citrus Industry, Vol 1, p 536. Thermotherapy and shoot tip grafting to remove psorosis and exocortis. Tree. Cultivar. Cutting.
- PI 539404 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3959. origin: UNKNOWN. cultivar: Egami Buntan. local name: Egami, Ogami pummelo. remarks: See The Citrus Industry, Vol 1, p 538. Tree. Cultivar. Cutting.
- PI 539405 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3961. origin: UNKNOWN. cultivar: Banpeiyu. local name: Pai You, Taiwan pummelo. remarks: See The Citrus Industry, Vol 1 , p 536. Tree. Cultivar. Cutting.

- PI 539406 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 3978. origin: UNKNOWN. cultivar: Kinokawa Buntan. local name: Kinokawa pummelo. Tree. Cultivar. Cutting.
- PI 539407 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 448. origin: UNKNOWN. cultivar: Moanalua. remarks: Seedling yellows removed by thermotherapy 1985. Resembles Tahitian (CRC 3806) but thicker rind, much more sour. This and Tahitian are dwarf trees for pummelos. Citrus Industry, Vol. 1, pp 537-538, gives Moanalua as synonym for Tahitian pummelo. Tree. Cultivar. Cutting.
- PI 539408 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 578. origin: UNKNOWN. cultivar: Fleming's Shaddock. remarks: Very mild strain of exocortis 1985. Medium to large, deep yellow, pyriform with pronounced neck. Rind slightly rough, fairly thick; seedy; flesh coarse, white to pale yellow, not very juicy, flavor fair. Tree. Cultivar. Cutting.
- PI 539409 Citrus maxima (Burman) Merr. RUTACEAE Pummelo donor id: CRC 644. origin: UNKNOWN. cultivar: Philippine. pedigree: Open pollinated seedling. remarks: Medium to large, pyriform pummelo with light yellow, thick rind; medium-size hollow core; very seedy; light yellow flesh; sour. Tree. Cultivar. Seed.
- PI 539410 Citrus maxima (Burman) Merr. RUTACEAE Pummelo hybrid donor id: CRC 1462. origin: UNKNOWN. cultivar: Cuban Shaddock. remarks: Very large fruit, like shaddock in external appearance but mainly like lemon in foliage and internal fruit character. Seeds small and of type like rough lemon. Exocortis removed by shoot tip grafting 1985. Tree. Cultivar. Cutting.
- PI 539411 Citrus maxima (Burman) Merr. RUTACEAE Pummelo hybrid donor id: CRC 1481. origin: UNKNOWN. cultivar: Lemelo. remarks: Fruit medium large; yellow, medium-thick rind; flesh pale yellow, seedy, slightly sour but almost edible. Tight, compact tree. Tree. Cultivar. Cutting.
- PI 539412 Citrus maxima (Burman) Merr. RUTACEAE Pummelo hybrid donor id: CRC 1775. origin: UNKNOWN. cultivar: Lemon Shaddock. pedigree: Open pollinated seedling. local name: lemelo. remarks: Exocortis removed by shoot tip grafting 1985. Open-growing tree. Fruit large, pale yellow; medium to thick rind; flesh yellow with pink blush in some fruits; few seeds; very sour. Tree. Cultivar.

- PI 539413 Citrus medica L. RUTACEAE Citron
 donor id: CRC 138-A. origin: UNKNOWN. cultivar: Indian.
 pedigree: Open pollinated seedling. remarks: Typical
 citron with lemon yellow, moderately bumpy, slightly
 fluted rind. Individual fruit size from medium/small to
 large; many fruits have long, pointed nose and persistent
 style. Rind moderately thick to thick; flesh light
 yellow, sour. Seeds small, numerous. Tree. Cultivar.
 Seed.
- PI 539414 Citrus medica L. RUTACEAE Citron donor id: CRC 138-B. origin: UNKNOWN. cultivar: Indian. pedigree: Open pollinated seedling. remarks: Exocortis removed by shoot tip grafting 1985. Similar in appearance to CRC 138-A. On average, 138-A has longer needle-nose, appears slightly rougher, fruit size slightly smaller. Tree. Cultivar. Seed.
- PI 539415 Citrus medica L. RUTACEAE Citron
 donor id: CRC 1795. origin: UNKNOWN. cultivar:
 Corsican. local name: Corsican, Citron of Commerce.
 remarks: Fruit matches Citrus Industry description (Vol
 1, pp 557-558) well and is sweet as it is supposed to be.
 See CRC 3518 notes. Tree. Cultivar. Cutting.
- PI 539416 Citrus medica L. RUTACEAE Citron
 donor id: CRC 2456. origin: UNKNOWN. cultivar: Djerok.
 pedigree: C. medica x C. medica (unknown cultivars).
 remarks: Exocortis removed by shoot tip grafting 1985.
 Fruit medium to large, elongate with nipple; rind light
 yellow, slightly rough and furrowed, moderately thick;
 moderately seedy; flesh very light yellow; sour,
 lemon-like flavor. Tree. Cultivar.
- PI 539417 Citrus medica L. RUTACEAE Citron donor id: CRC 3055. origin: UNKNOWN. cultivar: Bengal. local name: Bengel citron. remarks: Foliage not entirely citron-like; fruit large, pummelo size; rind medium yellow, moderately smooth, like slightly rough navel orange, thick; seedy; flesh light yellow, sour. Many fruits on ground 12/87. Tree. Cultivar. Seed.
- PI 539418 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3190. origin: UNKNOWN. cultivar: Dabbe.
 pedigree: Open pollinated seedling. remarks: Large, very
 rough, light lemon yellow, cylindrical fruits; very thick
 rind, seedy, sour. Tree. Cultivar. Seed.

- PI 539419 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3518. origin: UNKNOWN. cultivar: Citron
 of Commerce. pedigree: Open pollinated seedling. local
 name: Citron of Commerce, Corsican. remarks: See The
 Citrus Industry, Vol 1, pp 556-557. Sour (Citron of
 Commerceis supposed to be sweet). Tree. Cultivar.
 Cutting.
- PI 539420 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3519. origin: UNKNOWN. cultivar: Citron
 of Commerce. pedigree: Open pollinated seedling. local
 name: Citron of Commerce, Corsican. Tree. Cultivar.
 Cutting.
- PI 539421 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3520. origin: UNKNOWN. cultivar:
 Corsican. pedigree: Open pollinated seedling. local
 name: Corsican, Citron of Commerce. remarks: See The
 Citrus Industry, Vol 1, pp 556-7. Tree. Cultivar.
 Cutting.
- PI 539422 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3521. origin: UNKNOWN. cultivar:
 Corsican. pedigree: Open pollinated seedling. local
 name: Corsican, Citron of Commerce. remarks: See The
 Citrus Industry, Vol 1, pp 556-557. Tree. Cultivar.
 Cutting.
- PI 539423 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3522. origin: UNKNOWN. cultivar:
 Diamante. pedigree: Open pollinated seedling. local
 name: Diamante, Cedro Liscio. remarks: See The Citrus
 Industry, Vol 1, pp 554-554. Tree. Cultivar. Cutting.
- PI 539424 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3523. origin: UNKNOWN. cultivar:
 Diamante. pedigree: Open pollinated seedling. local
 name: Diamante, Cedro Liscio. remarks: See The Citrus
 Industry, Vol 1, pp 554-555. Tree. Cultivar. Cutting.
- PI 539425 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3526. origin: UNKNOWN. cultivar: Etrog.
 pedigree: Open pollinated seedling. local name: Ethrog,
 Etrog, Atrog. remarks: See The Citrus Industry, Vol 1,
 p. 555. Tree. Cultivar. Cutting.

- PI 539426 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3527. origin: UNKNOWN. cultivar:
 Hiawassie. pedigree: Open pollinated seedling. remarks:
 From U.S. Hort. Station, Orlando Florida. Typical
 medium-sized citron, oval to elongate; smooth, yellow,
 moderately thick rind; pithy core; seedy; very sour.
 Tree. Cultivar. Cutting.
- PI 539427 Citrus medica L. RUTACEAE Citron donor id: CRC 3529. origin: UNKNOWN. cultivar: Indian. pedigree: Open pollinated seedling. Tree. Cultivar. Cutting.
- PI 539428 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3530. origin: UNKNOWN. cultivar: Italian.
 pedigree: Open pollinated seedling. local name: Italian,
 Diamante. remarks: From U.S. Hort. Station, Orlando,
 Florida. See The Citrus Industry, Vol 1, p 555. Tree.
 Cultivar. Cutting.
- PI 539429 Citrus medica L. RUTACEAE Citron donor id: CRC 3531. origin: UNKNOWN. cultivar: Mexican. pedigree: Open pollinated seedling. Tree. Cultivar. Cutting.
- PI 539430 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3532. origin: UNKNOWN. cultivar: Papuan.
 pedigree: Open pollinated seedling. Tree. Cultivar.
 Cutting.
- PI 539431 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3533. origin: UNKNOWN. cultivar:
 Philippine. pedigree: Open pollinated seedling.
 remarks: Medium-large, elongate citron with blunt nose,
 persistent style; rind dark yellow, thick; seedy; very
 sour. Tree. Cultivar. Cutting.
- PI 539432 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3534. origin: UNKNOWN. cultivar: Sicily.
 pedigree: Open pollinated seedling. local name: Sicilia,
 Diamante. remarks: From U.S. Hort. Station, Orlando,
 Florida. See The Citrus Industry, Vol 1, p 555.
 Medium-large, elongate citron with blunt nose; rind
 smooth but bumpy and furrowed, yellow, very thick; small
 core; seedy; very sour. Very similar to Diamante (CRC
 3523). Tree. Cultivar. Cutting.

- PI 539433 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3535. origin: UNKNOWN. cultivar:
 Spadifora. pedigree: Open pollinated seedling. remarks:
 Medium-large citron, stubby, almost round; yellow rind,
 very thick, very bumpy, deeply furrowed, especially at
 stem end; very seedy; flesh dry, coarse, almost
 tasteless--bland and slightly sweet. Tree. Cultivar.
 Cutting.
- PI 539434 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3536. origin: UNKNOWN. cultivar: Yemen.
 pedigree: Open pollinated seedling. remarks: From U.S.
 Hort. Station, Orlando, Florida. Tree. Cultivar.
 Cutting.
- PI 539435 Citrus medica L. RUTACEAE Citron donor id: CRC 3546. origin: UNKNOWN. cultivar: South Coast Field Station. local name: South Coast citron. remarks: Medium-sized, elongate citron with prominent nose; rind yellow, thick, moderately pebbled and furrowed; flesh green, sour; seedy. Tree. Cultivar. Cutting.
- PI 539436 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3654. origin: UNKNOWN. cultivar: Dulcia.
 pedigree: Open pollinated seedling. local name: Dulcia
 citron. remarks: Small, about size and shape of large
 market tomato, flattened at both ends; yellow rind thin
 compared with most citrons; some with persistent style;
 large, pithy core; seedy; sour, lemon-like flavor; leaves
 small with blunt tip but fairly typical of citron. Tree.
 Cultivar. Cutting.
- PI 539437 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3655. origin: UNKNOWN. cultivar: Odorata.
 pedigree: Open pollinated seedling. local name:
 Tihi-Tihi, Odorata citron. remarks: Fruit size varies;
 some huge. Smooth, slightly bumpy, very thick rind,
 lemon-yellow at maturity; shape oblong to elongate;
 seedy; flesh white, dry, coarse, without flavor,
 apparently almost no sugar or acid. Tree. Cultivar.
 Cutting.
- PI 539438 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3723. origin: UNKNOWN. cultivar: Badhri.
 pedigree: Open pollinated seedling. local name: Badhri
 "lemon". remarks: Tree large, vigorous; fruit about size
 of large navel orange; rind dark yellow, moderately rough
 and ribbed, medium-thick; round to elongate; seedy; flesh
 light orange-yellow; sweet, insipid. Tree. Cultivar.
 Seed.

- PI 539439 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3755. origin: UNKNOWN. cultivar: Limau
 Matu Susu. pedigree: Open pollinated seedling. local
 name: Limau Matu Susu citron. remarks: Seeds from
 Malaysia. Small to medium-sized citron with smooth,
 yellow rind, thin for citron; pointy nose; fruit shape
 varies from almost round to elongate; seedy; flesh light
 yellow; sour, lemon-like flavor. Tree. Cultivar. Seed.
- PI 539440 Citrus medica L. RUTACEAE Citron donor id: CRC 3819. origin: UNKNOWN. local name: Citron type. remarks: Exocortis removed by shoot tip grafting. Medium size, flattened, highly fluted, yellow fruit; thick rind; seedy; large, pithy core; flesh light yellow, sour. Tree. Cutting.
- PI 539441 Citrus medica L. RUTACEAE Citron
 donor id: CRC 3878. origin: UNKNOWN. cultivar: Arizona
 861. local name: S-1 citron (Etrog type). remarks:
 Especially sensitive as indicator for mild citron viroid.
 Fruit much like Etrog but no persistent style. Tree.
 Cultivar. Seed.
- PI 539442 Citrus medica L. RUTACEAE Citron donor id: CRC 3922. origin: UNKNOWN. cultivar: Bamban. local name: Bamban citron. remarks: Appears to be small-fruited lemon. Very similar to CRC 3923. Tree. Cultivar. Seed.
- PI 539443 Citrus medica L. RUTACEAE Citron donor id: CRC 3923. origin: UNKNOWN. cultivar: Satina. local name: Satina citron. remarks: Similar to CRC 3922.

 Tree. Cultivar. Seed.
- PI 539444 Citrus medica L. RUTACEAE Citron hybrid donor id: CRC 2695. origin: UNKNOWN. cultivar: Faris. remarks: Fruit smooth, typical lemon shape but juice sweet. Exocortis removed by shoot tip grafting 1986.

 Tree. Cultivar. Seed.
- PI 539445 Citrus medica var. sarcodactylis (Nooten) Swingle RUTACEAE Citron donor id: CRC 3768. origin: UNKNOWN. local name: Buddha's Hand, fingered citron. remarks: See The Citrus Industry, Vol 1, p 372. Exocortis removed by shoot tip grafting. Tree. Cutting.

- PI 539446 Citrus megaloxycarpa Lush. RUTACEAE Lemon donor id: CRC 3241. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Bor-tenga. remarks: Large, vigorous, open-growing trees; leaves large, citron-like; fruits like medium to medium-large citron; rind yellow, rough, medium-thick; seedy; flesh pale yellow, coarse, sour, not juicy; much more vigorous than other citrons in collection. Tree. Seed.
- PI 539447 Citrus meyeri Yuich. Tanaka RUTACEAE Lemon hybrid donor id: CRC 3737. origin: UNKNOWN. cultivar: Improved Meyer. local name: Improved Meyer lemon. remarks: Thermotherapy for tatterleaf-citrange stunt. Original source was U S Date and Citrus Station, Indio, CA. See The Citrus Industry, Vol 1, p 571. Tree. Cultivar. Cutting.
- PI 539448 Citrus miaray Wester RUTACEAE Sour orange hybrid donor id: CRC 3574. origin: UNKNOWN. pedigree: C. aurantium x? Open pollinated seedling. local name: Miaray. remarks: Foliage lanceolate, pointed, somewhat mandarin-like, with lined to narrowly winged petioles; fruit small, round, bumpy, yellow to orange; rind medium-thick; seedy; flesh light yellow-orange; very sour. Tree. Seed.
- PI 539449 Citrus montana (Wester) T. Tanaka RUTACEAE Papeda hybrid donor id: CRC 767. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Weeping Philippine hybrid. remarks: Citrus Industry, Vol 1, p 397: "Seems to be hybrid of native C. macroptera with common Philippine mandarin." See also CRC 1456. Very seedy, acid fruit. received as: Citrus webberi var. montana. Tree. Seed.
- PI 539450 Citrus myrtifolia Raf. RUTACEAE Sour orange donor id: CRC 3290. origin: UNKNOWN. local name:

 Myrtleleaf orange. remarks: Described in The Citrus Industry, Vol 1, pp 378-379. Very compact tree; small leaves tend to be cupped. received as: Citrus aurantium var. myrtifolia. Tree.
- PI 539451 Citrus myrtifolia Raf. RUTACEAE Sour orange donor id: CRC 2375-B. origin: UNKNOWN. cultivar: Chinotto. remarks: Not clear which budline this is--probably the "Large Chinotto" described in Citrus Industry, Vol. I, p. 494. This and daughter, CRC 3857, appear identical. Fruit not nearly as sour as true sour orange. Tree. Cultivar. Plant.

- PI 539452 Citrus myrtifolia Raf. RUTACEAE Sour orange donor id: CRC 3857. origin: UNKNOWN. cultivar: Chinotto. pedigree: Open pollinated seedling. local name: Chinotto, Chinois. remarks: See The Citrus Industry, Vol. 1, p 494. Fruit not nearly as sour as true sour orange. Tree. Cultivar. Seed.
- PI 539453 Citrus natsudaidai Hayata RUTACEAE Sour orange hybrid donor id: CRC 3235. origin: UNKNOWN. cultivar:
 Natsudaidai. pedigree: Open pollinated seedling. local name: Japanese summer grapefruit, Daidai. remarks: Fruit light yellow; rough, thick rind; flesh coarse, juicy, melting, like grapefruit; most fruits granulating 5-88.

 Tree. Cultivar. Seed.
- PI 539454 Citrus nippokoreana T. Tanaka RUTACEAE Mandarin donor id: CRC 3228. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Korai tachibana. remarks: Notes from T. Tankaka, Citrologia, p. 34, 1961: "Indigenous plants have...spiny erect trunk...very spiny branches, large leaves, fruit small...rind thick, many seeds, pulp acid.". Tree. Seed.
- PI 539455 Citrus nobilis Lour. RUTACEAE Mandarin donor id: CRC 3346. origin: UNKNOWN. cultivar: Kunembo. pedigree: Open pollinated seedling. remarks: See The Citrus Industry, Vol 1, p 506. Large fruit, thick rind, flavor fair, lots of rag. Tree. Cultivar. Seed.
- PI 539456 Citrus nobilis Lour. RUTACEAE Mandarin hybrid donor id: CRC 303. origin: UNKNOWN. cultivar: King. pedigree: C. reticulata x C. sinensis. remarks: May be a natural tangor. Tree. Cultivar. Cutting.
- PI 539457 Citrus nobilis Lour. RUTACEAE Mandarin hybrid donor id: CRC 3845. origin: UNKNOWN. cultivar: King. pedigree: Open pollinated seedling. local name: King tangor, King of Siam. remarks: See The Citrus Industry, Vol 1, pp 505-507. Tree. Cultivar. Seed.
- PI 539458 Citrus obovoidea hort. ex I. Takah. RUTACEAE Pummelo hybrid donor id: CRC 3465. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Marumero, Kinkoji. remarks: Large fruit, yellow-orange; globose, stem end rounded and slightly depressed, stylar end flat; rind 5-6 mm thick; core average, slightly hollow; 10-15 seeds, highly polyembryonic; flesh juicy, raggy but tender, taste pleasant, slightly acid, low solids, not bitter; leaves elongated, tips acute, petiole long, average wings. Not commercial variety but excellent quick decline indicator. Tree. Seed.

- PI 539459 Citrus otachibana hort. ex Yuich. Tanaka RUTACEAE
 Grapefruit hybrid
 donor id: CRC 3470. origin: UNKNOWN. pedigree: possible
 pummelo hybrid. local name: Otachibana, Daikitsu,
 Kotobukikan. remarks: Large, yellow, pyriform fruit;
 rind moderately rough, thick; seedy; flesh dark yellow,
 juicy, melting, tolerably edible but tart. Foliage
 pummelo-like. Tree. Seed.
- PI 539460 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 1198. origin: UNKNOWN. cultivar: Foster Pink. remarks: Exocortis removed by shoot tip grafting 1985. Very seedy; faint pink tinge in flesh, perhaps even lighter pink than Redblush. Tree. Cultivar. Cutting.
- PI 539461 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 1565. origin: UNKNOWN. cultivar: Marsh seedy. remarks: Exocortis and seedling yellows removed by shoot tip grafting 1985. Typical seedy white grapefruit. Very similar to CRC Nos. 2784, 3139, 3068, and 3832. Tree. Cultivar. Cutting.
- PI 539462 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 2010. origin: UNKNOWN. cultivar: Marsh Pink. remarks: Exocortis removed by shoot tip grafting 1985. Very similar to Redblush. Tree. Cultivar. Cutting.
- PI 539463 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 2014. origin: UNKNOWN. cultivar: Cecily. remarks: Originated in South Africa. Exocortis and vein enation removed by shoot tip grafting 1985.

 Indistinguishable from Marsh; daughter CRC 3637 appears identical. Tree. Cultivar. Cutting.
- PI 539464 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 2381. origin: UNKNOWN. cultivar: Poorman. pedigree: Cudebeck strain. local name: New Zealand. remarks: Seedling yellows removed by thermotherapy 1985. This and CRC 3769 have trunk and branch bark condition described in Citrus Industry, Vol 1, p 550: "In California...associated with dwarfing. Surface of trunk and main limbs markedly rough and grayish-black...dull-black streaks on smaller branches and twigs.". Tree. Cultivar. Cutting.

- PI 539465 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 248. origin: UNKNOWN. cultivar: Royal. remarks: Very similar to CRC 297 (Triumph) and CRC 596 (Imperial). Different from common seedy white grapefruit in that rind color somewhat darker yellow, rind slightly thicker, flesh slightly darker yellow and slightly coarser, and flavor sweeter, lacking typical grapefruit flavor and bitterness. Tree. Cultivar. Cutting.
- PI 539466 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 2784. origin: UNKNOWN. cultivar:

 Jochimsen. remarks: Typical seedy white grapefruit. Very similar to CRC Nos. 1565, 3139, 3068, and 3832. Tree. Cultivar. Seed.
- PI 539467 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 2850. origin: UNKNOWN. cultivar: Redblush. pedigree: open pollinated seedling. local name: Redblush. remarks: Light to faint pink tinge in flesh color. Tree. Cultivar. Seed.
- PI 539468 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 2885. origin: UNKNOWN. cultivar: Wheeny. remarks: Excellent flavor, no bitter taste. Trees breaking from enormous crop load, but fruit still relatively good size; very seedy, has large hollow core, flesh lighter in color than other seedy white grapefruit. Tree. Cultivar. Cutting.
- PI 539469 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 297. origin: UNKNOWN. cultivar: Triumph. remarks: Hybrid-orange taste? Exocortis removed by shoot tip grafting 1985. Citrus Industry (Vol 1, pp 542-543) suggests that this might be natural orangelo instead of pure grapefruit. Appears very similar to CRC 297. Tree. Cultivar. Cutting.
- PI 539470 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 3068. origin: UNKNOWN. cultivar: Hall. remarks: Typical seedy white grapefruit. Tree. Cultivar. Cutting.
- PI 539471 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 3128. origin: UNKNOWN. cultivar: Reed Marsh. pedigree: Open pollinated seedling. remarks: Typical Marsh fruit; appears identical to CRC 3184 and 3804. Tree. Cultivar. Cutting.

- PI 539472 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 3139. origin: UNKNOWN. cultivar: Camulos. remarks: Typical seedy white grapefruit; very similar to CRC Nos. 1565, 2784, 3068, and 3832. Tree. Cultivar. Cutting.
- PI 539473 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 3184. origin: UNKNOWN. cultivar: Frost Marsh. remarks: Typical Marsh; appears identical to CRC 3128 and 3804. Tree. Cultivar. Seed.
- PI 539474 Citrus paradisi Macfad. RUTACEAE Grapefruit
 donor id: CRC 3398. origin: UNKNOWN. cultivar:
 Nicholson. pedigree: Open pollinated seedling. local
 name: Nicholson navel. remarks: Typical white
 grapefruit; navel structure small, hardly noticeable on
 most fruits; moderately seedy. Tree. Cultivar. Seed.
- PI 539475 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 343. origin: UNKNOWN. local name: unnamed. remarks: One of the better grapefruit rootstocks--used as a source in rootstock trials. Smallish fruit for a grapefruit; very seedy. Foliage different from typical grapefruit--leaves more rounded at apex and tend to be cupped. Tree. Cutting.
- PI 539476 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 3637. origin: UNKNOWN. cultivar: Cecily. local name: Cecily grapefruit. remarks: See The Citrus Industry, Vol 1, p 545. Polyembryonic. Indistinguishable from CRC 2014 (Cecily). Tree. Cultivar. Seed.
- PI 539477 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 3638. origin: UNKNOWN. cultivar: Hudson Foster. pedigree: Open pollinated seedling. local name: Hudson Foster grapefruit. remarks: Dark pink flesh, about same as Star Ruby, but very seedy, sour. Tree. Cultivar. Cutting.
- PI 539478 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 3770. origin: UNKNOWN. cultivar: Star Ruby. local name: Star Ruby grapefruit. remarks: Fruit similar to Marsh or Redblush except for dark pink flesh. Tree. Cultivar. Cutting.

- PI 539479 Citrus paradisi Macfad. RUTACEAE Grapefruit
 donor id: CRC 3774. origin: UNKNOWN. cultivar: GENETIC
 DWARF. pedigree: Limb sport of Marsh grapefruit. local
 name: genetic dwarf grapefruit. remarks: Never released
 from University of California Riverside control.
 Exocortis removed by shoot tip grafting. Compact growth
 makes attractive tree, but not much smaller than other
 grapefruit; fruit typically Marsh but small. Tree.
 Cultivar. Cutting.
- PI 539480 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 3803. origin: UNKNOWN. cultivar: Whitney Marsh. local name: Whitney Marsh. remarks: Tristeza removed by thermotherapy. See "Lindcove Navel Strain Trials After Nine Years", Citrograph, Dec 1985. Tree. Cultivar. Cutting.
- PI 539481 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 3831. origin: UNKNOWN. cultivar: Shambar. pedigree: Open pollinated seedling. local name: Shambar grapefruit. remarks: See The Citrus Industry, Vol 1, p 546. At Lindcove, California, identical to Redblush. Tree. Cultivar. Cutting.
- PI 539482 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 3832. origin: UNKNOWN. cultivar: Duncan. local name: Duncan grapefruit. remarks: See The Citrus Industry, Vol 1, pp 541-2. Typical seedy white grapefruit. Tree. Cultivar. Seed.
- PI 539483 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 3914. origin: UNKNOWN. cultivar: Henderson Ruby. local name: Henderson Ruby grapefruit. Tree. Cultivar. Cutting.
- PI 539484 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 3915. origin: UNKNOWN. cultivar: Ray Ruby. local name: Ray Ruby grapefruit. Tree. Cultivar. Cutting.
- PI 539485 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 3916. origin: UNKNOWN. cultivar: Rio Red. local name: Rio Red grapefruit. Tree. Cultivar. Cutting.
- PI 539486 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 3968. origin: UNKNOWN. cultivar: Tetraploid. local name: tetraploid grapefruit. Tree. Cultivar. Cutting.

- PI 539487 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 3993. origin: UNKNOWN. cultivar: Flame. local name: Flame grapefruit. Tree. Cultivar. Cutting.
- PI 539488 Citrus paradisi Macfad. RUTACEAE Grapefruit donor id: CRC 596. origin: UNKNOWN. cultivar: Imperial. remarks: Exocortis removed by shoot tip grafting 1985. Very similar (maybe identical) to CRC 297 and 248. Somewhat different from common seedy white grapefruit in having darker yellow, thicker rind, flesh darker yellow and coarser, flavor sweeter, lacking typical grapefruit flavor and bitterness; more grapefruit-like than orange-like. Tree. Cultivar. Cutting.
- PI 539489 Citrus paradisi Macfad. RUTACEAE Grapefruit hybrid donor id: CRC 3909. origin: UNKNOWN. cultivar: Chironja. Tree. Cultivar. Cutting.
- PI 539490 Citrus paradisi Macfad. RUTACEAE Grapefruit hybrid donor id: CRC 3962. origin: UNKNOWN. cultivar: Rex Union. local name: Rex Union grapefruit. remarks: In South Africa not grown on commercial scale; not vigorous; fruit large like grapefruit, roundish, reddish-orange; makes top quality marmalade, not eaten as fresh fruit. Tree. Cultivar. Cutting.
- PI 539491 Citrus pyriformis Hassk. RUTACEAE Lemon hybrid donor id: CRC 294. origin: UNKNOWN. cultivar:
 Ponderosa. pedigree: C. medica x C. limon (unknown cultivars). local name: Ponderosa lemon. remarks:
 Seedling yellows and exocortis removed by shoot tip grafting 1985. Fruit looks like Citrus Industry description. Foliage more citron-like than lemon-like.
 Tree. Cultivar. Cutting.
- PI 539492 Citrus reshni hort. ex T. Tanaka RUTACEAE Mandarin donor id: CRC 3844. origin: UNKNOWN. cultivar: Cleopatra. pedigree: Open pollinated seedling. local name: Cleo, Cleopatra, Billi Kichili. remarks: See The Citrus Industry, Vol 1, p 525. Tree. Cultivar. Seed.
- PI 539493 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 2331. origin: UNKNOWN. cultivar: Hung Kat. remarks: Seedling yellows removed by thermotherapy 1985. Fruit in Riverside, California, is not good. Tree. Cultivar. Plant.
- PI 539494 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 2376. origin: UNKNOWN. cultivar: Tien Chieh. remarks: Small fruit, heavy crop. Peels and sections well; seedy; somewhat raggy; tart. Very similar to CRC 2590. Tree. Cultivar. Cutting.

- PI 539495 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 2590. origin: UNKNOWN. cultivar: Tien Chieh. local name: Tien Chieh. remarks: Small fruit but heavy crop. Peels and sections well; seedy; somewhat raggy; tart. Much of crop on ground 3/87. Very similar to CRC 2376. Tree. Cultivar. Cutting.
- PI 539496 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 2893. origin: UNKNOWN. cultivar: Laranja Cravo. local name: Tangerina Cravo. Tree. Cultivar. Cutting.
- PI 539497 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 300. origin: UNKNOWN. cultivar: Parson's Special. remarks: Seedling yellows removed by thermotherapy 1985. Tree. Cultivar. Cutting.
- PI 539498 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3019. origin: UNKNOWN. cultivar: Kara. pedigree: C. unshiu 'Owari' x C. nobilis. Tree. Cultivar.
- PI 539499 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3020. origin: UNKNOWN. cultivar: Wilking. pedigree: C. nobilis x C. deliciosa. remarks: Tiny fruit, large crop. Tree. Cultivar.
- PI 539500 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3021. origin: UNKNOWN. cultivar: Kinnow. pedigree: C. nobilis x C. deliciosa. Tree. Cultivar.
- PI 539501 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3022. origin: UNKNOWN. cultivar: Frua. pedigree: C. nobilis x C. tangerina. remarks: Weak tree, much dieback 1987. Tree. Cultivar.
- PI 539502 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3085. origin: UNKNOWN. cultivar: Szinkom. pedigree: Open pollinated seedling. local name: Szinkom mandarin. remarks: Medium-small fruit; orange rind, puffy, peels and sections well; seedy; somewhat raggy; flavor fair. Tree. Cultivar. Seed.
- PI 539503 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3177. origin: UNKNOWN. cultivar: Honey. pedigree: C. nobilis x C. deliciosa. Tree. Cultivar. Seed.

- PI 539504 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3328. origin: UNKNOWN. cultivar: Solid Scarlet. pedigree: Open pollinated seedling. remarks: Notes from T. Tankaka, Citrologia, p. 34, 1961: "Indigenous plants have...spiny erect trunk...very spiny branches, large leaves, fruit small...rind thick, many seeds, pulp acid.". Tree. Cultivar. Cutting.
- PI 539505 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3326. origin: UNKNOWN. cultivar: Scarlet Emperor. pedigree: Open pollinated seedling. remarks: From Australia. Medium-size fruit, orange rind with dark orange blush. Very puffy; peels and sections well; raggy; seedy; flavor fair to good, sweet. Tree. Cultivar. Cutting.
- PI 539506 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3329. origin: UNKNOWN. cultivar:
 Richard's Special. pedigree: Open pollinated seedling.
 remarks: From Australia. Large fruit; orange-yellow rind, puffy, peels and sections well; few seeds; flavor fair; little rag. Tree. Cultivar. Cutting.
- PI 539507 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3558. origin: UNKNOWN. cultivar: Fremont. remarks: Very small fruit; seedy, good flavor. See The Citrus Industry, Vol 1, p 515. Tree. Cultivar. Cutting.
- PI 539508 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3559. origin: UNKNOWN. cultivar: Fairchild. remarks: See The Citrus Industry, Vol 1, p 515. Tree. Cultivar. Cutting.
- PI 539509 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3560. origin: UNKNOWN. cultivar: Fortune. remarks: Monoembryonic. See The Citrus Industry, Vol 1, p 515. Small fruit; good rind color; sour. Tree. Cultivar. Cutting.
- PI 539510 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3568. origin: UNKNOWN. cultivar: Pixie. remarks: See The Citrus Industry, Vol 1, p 524. Nice to eat; fruit small; seedless; good home garden variety. Tree. Cultivar. Cutting.

- PI 539511 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3569. origin: UNKNOWN. cultivar: Encore. pedigree: C. nobilis x C. deliciosa. remarks: See The Citrus Industry, Vol 1, pp 514-515. Monoembryonic; excellent flavor; desirable as home garden variety but non-commercial due to rind spots. Can be held on tree as late as September. Alternate bearing. Tree. Cultivar. Cutting.
- PI 539512 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3577. origin: UNKNOWN. cultivar: Changsha. pedigree: Open pollinated seedling. remarks: Highly alternate bearing; fruit small, puffy, seedy, sweet. One of the few trees that came through 1962-63 winter freeze. Tree. Cultivar. Seed.
- PI 539513 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3613. origin: UNKNOWN. cultivar: Empress. pedigree: Open pollinated seedling. local name: Empress mandarin. remarks: Polyembryonic. Good-sized fruit; light rind color; peels and sections well; good flavor; few seeds; very raggy. See The Citrus Industry, Vol 1, p 522. Tree. Cultivar. Seed.
- PI 539514 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3615. origin: UNKNOWN. cultivar: Nova. pedigree: C. clementina x C. xtangelo 'Orlando' Open pollinated seedling. local name: Nova mandarin. remarks: See The Citrus Industry, Vol 1, p 518. Polyembryonic. Holds well on tree; peels poorly but excellent to eat, few seeds. Tree. Cultivar. Cutting.
- PI 539515 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3649. origin: UNKNOWN. cultivar: Bower. pedigree: C. clementina x C. xtangelo 'Orlando'. local name: Bower mandarin. remarks: Highly alternate bearing; poor peeler; good flavor. Developed by USDA in Orlando, Florida. Tree. Cultivar. Cutting.
- PI 539516 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3659. origin: UNKNOWN. cultivar:
 Batangas. pedigree: Open pollinated seedling. local name: Batangas mandarin. Tree. Cultivar. Cutting.
- PI 539517 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3731. origin: UNKNOWN. pedigree: C. clementina x C. unshiu 'Silverhill'. remarks: Silverhill was nucellar seedling budline of Owari Satsuma. Highly alternate bearing; fruit large even with very heavy crop, but poor quality and flavor. Tree. Cutting.

- PI 539518 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3738. origin: UNKNOWN. local name: Necked orange #1. remarks: See The Citrus Industry, Vol 1, p 524. Shape and size like Minneola; rind yellow-orange; peels and sections fair; few seeds; sweet flavor but not rich; little/no rag. Tree. Seed.
- PI 539519 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3752. origin: UNKNOWN. cultivar: Som Keowan. pedigree: Open pollinated seedling. local name: Som Keowan mandarin. remarks: Polyembryonic. Small fruit with heavy crop; spherical to slightly oblate; medium-light orange rind; peels and sections well; seedy; good flavor; juicy; little rag. Tree. Cultivar. Seed.
- PI 539520 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3809. origin: UNKNOWN. cultivar: Sunburst. local name: Sunburst mandarin. remarks: Thermotherapy, 1979. Small fruit; beautiful dark orange color, smooth rind; too seedy; too small; very poor peeler; good flavor; some Encore-like spots. Tree. Cultivar. Cutting.
- PI 539521 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3846. origin: UNKNOWN. cultivar: Murcott. pedigree: Open pollinated seedling. local name: Murcott, Murcott Honey, Smith. remarks: See The Citrus Industry, Vol 1, pp 517-18. Tree. Cultivar. Cutting.
- PI 539522 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3847. origin: UNKNOWN. cultivar: Hill. pedigree: Open pollinated seedling. Tree. Cultivar. Seed.
- PI 539523 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3849. origin: UNKNOWN. cultivar: Ponkan. pedigree: Open pollinated seedling. local name: Ponkan, Nagpur, Warnurco. remarks: See The Citrus Industry, Voll, pp 520-21. Alternate bearing, but fruit size OK; light orange rind, puffy, peels and sections readily; flavor fair; seedy; considerable rag; Ponkan type. Tree. Cultivar. Seed.
- PI 539524 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3850. origin: UNKNOWN. cultivar: Robinson. pedigree: C. clementina x C. xtangelo 'Orlando'. local name: Robinson mandarin. remarks: Mild citron viroid removed by shoot tip grafting. See The Citrus Industry, Vol 1, p 521. Small fruit. Tree. Cultivar. Cutting.

- PI 539525 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3851. origin: UNKNOWN. cultivar: Lee. pedigree: C. clementina x C. xtangelo 'Orlando'. local name: Lee mandarin. remarks: See The Citrus Industry, Vol 1, p 517. Tree. Cultivar. Cutting.
- PI 539526 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3852. origin: UNKNOWN. cultivar: Som Kaeo II. local name: Crystal. remarks: Medium-large, attractive fruit; large crop; peels and sections readily, but most fruit on ground and still too sour to eat in March. Tree. Cultivar. Seed.
- PI 539527 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3853. origin: UNKNOWN. cultivar: Som Saa. remarks: Most fruit on ground 3/87; medium size; rind medium orange, peels and sections fair; moderate number of seeds; rich flavor, tart, like Kara. Tree. Cultivar. Seed.
- PI 539528 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3895. origin: UNKNOWN. local name: Yellow Rind. Tree. Seed.
- PI 539529 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3897. origin: UNKNOWN. cultivar: Huang Yen Man Chieh. Tree. Cultivar. Seed.
- PI 539530 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3906. origin: UNKNOWN. cultivar: Seedless Kishu. remarks: Had thermotherapy to remove tristeza. Tree. Cultivar. Cutting.
- PI 539531 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3910. origin: UNKNOWN. cultivar: Daisy. pedigree: C. reticulata 'Fortune'x C. reticulata 'Fremont'. local name: Daisy mandarin. Tree. Cultivar. Cutting.
- PI 539532 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3913. origin: UNKNOWN. pedigree: o.p. of Kincy. local name: Pixie-like. Tree. Cutting.
- PI 539533 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3953. origin: UNKNOWN. cultivar: W. Murcott. local name: Afourer. Tree. Cultivar. Cutting.
- PI 539534 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3956. origin: UNKNOWN. pedigree: C. reticulata 'Novelty' x C. reticulata 'Ellendale'. remarks: Rind texture coarse. Tree. Cutting.

- PI 539535 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3958. origin: UNKNOWN. cultivar: Koster. pedigree: C. reticulata x C. sinensis?. local name: Ellendale? Ellendale Beauty?. remarks: In South Africa appears to be typical Ellendale; eating quality very good; up to 15 seeds per fruit. See The Citrus Industry, Vol 1, p 514. Tree. Cultivar. Cutting.
- PI 539536 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3960. origin: UNKNOWN. cultivar: Ellendale. pedigree: C. reticulata x C. sinensis?. local name: Ellendale mandarin. remarks: See The Citrus Industry, Vol 1, p 514. Tree. Cultivar. Cutting.
- PI 539537 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3972. origin: UNKNOWN. pedigree: (C. temple x C. tangerina) x C. reticulata 'Encore'. local name: JWC priority #1. Tree. Cutting.
- PI 539538 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3973. origin: UNKNOWN. pedigree: (C. temple x C. tangerina) x C. reticulata 'Encore'. local name: JWC priority #2. Tree. Cutting.
- PI 539539 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3974. origin: UNKNOWN. pedigree: (C. temple x C. tangerina) x C. reticulata 'Encore'. local name: JWC priority #3. Tree. Cutting.
- PI 539540 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3975. origin: UNKNOWN. pedigree: (C. temple x C. tangerina) x C. reticulata 'Encore'. local name: JWC priority #4. Tree. Cutting.
- PI 539541 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3990. origin: UNKNOWN. cultivar: Fallglo. local name: Fallglo mandarin. Tree. Cultivar. Cutting.
- PI 539542 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3991. origin: UNKNOWN. pedigree: C. reticulata 'Lee' x C. reticulata 'Nova'. Tree. Cutting.
- PI 539543 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 3992. origin: UNKNOWN. pedigree: C. reticulata 'Robinson' x C. reticulata 'Lee'. Tree. Cutting.
- PI 539544 Citrus reticulata Blanco RUTACEAE Mandarin donor id: CRC 4003. origin: UNKNOWN. cultivar: Sun Chu Sha. local name: Sun Chu Sha. Tree. Cultivar. Cutting.

- PI 539545 Citrus rokugatsu hort. ex Yuich. Tanaka RUTACEAE Sour orange hybrid donor id: CRC 3473. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Rokugatsu mikan, Za daidai. remarks: Polyembryonic; fleshy calyx; heavy crop; size of small orange; round but flattened at ends, particularly at apical end which may be depressed and exhibit depressed ring; rind light orange, moderately thick, rough, loose puffy; peels like Satsuma; moderately seedy; flesh light to medium orange, juicy, sour. Tree. Seed.
- PI 539546 Citrus shunkokan hort. ex T. Tanaka RUTACEAE Grapefruit hybrid donor id: CRC 3476. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Shunkokan. remarks: Medium-sized fruit; yellow rind; oblate with depression at apex; rind moderately rough, thick; seedy; medium-large hollow core; flesh light yellow, coarse but juicy, flavor sweet; not attractive fruit. Tree. Seed.
- PI 539547 Citrus sinensis (L.) Osbeck RUTACEAE Blood orange donor id: CRC 2561. origin: UNKNOWN. cultivar: Burris Valencia. remarks: Coarser than normal Valencia fruit. Nearly seedless; number of red juice vesicles variable. Seedling yellows removed by thermotherapy 1987. Tree. Cultivar. Cutting.
- PI 539548 Citrus sinensis (L.) Osbeck RUTACEAE Blood orange donor id: CRC 3401. origin: UNKNOWN. cultivar: Sanguine Grosse Ronde. pedigree: Open pollinated seedling. remarks: No blood coloration 3/87. Appears to be common mid-season seedy sweet orange. Tree. Cultivar. Seed.
- PI 539549 Citrus sinensis (L.) Osbeck RUTACEAE Blood orange donor id: CRC 3596. origin: UNKNOWN. cultivar: Tarocco #7. pedigree: Open pollinated seedling. local name: Tarocco Blood orange. remarks: Good fruit production, vigor, fruit size; very nice flavor; few seeds; external color faint red, internal color medium. Exocortis removed by shoot tip grafting 1986. See The Citrus Industry, Vol 1, pp 474-475. Tree. Cultivar. Cutting.
- PI 539550 Citrus sinensis (L.) Osbeck RUTACEAE Blood orange donor id: CRC 3811. origin: UNKNOWN. cultivar: Moro. local name: Moro, Belladonna Sanguigno. remarks: Appears identical to CRC 3830. Tree. Cultivar. Seed.

- PI 539551 Citrus sinensis (L.) Osbeck RUTACEAE Blood orange donor id: CRC 3827. origin: UNKNOWN. cultivar: Ruby. pedigree: Open pollinated seedling. local name: Ruby blood orange. remarks: See The Citrus Industry, Vol 1, pp 473-4. Fairly seedy; good flavor. Tree. Cultivar. Cutting.
- PI 539552 Citrus sinensis (L.) Osbeck RUTACEAE Blood orange donor id: CRC 3828. origin: UNKNOWN. cultivar: Sanguinelli. pedigree: Open pollinated seedling. local name: Sanguinelli, Spanish Sanguinelli. remarks: See The Citrus Industry, Vol 1, p 474. Elongate; tends to small size when crop heavy; few seeds. Tree. Cultivar. Cutting.
- PI 539553 Citrus sinensis (L.) Osbeck RUTACEAE Blood orange donor id: CRC 3829. origin: UNKNOWN. cultivar: Sanguinello a pignu. pedigree: Open pollinated seedling. local name: Sanguinelli a pignu. remarks: Similar to Vascaro (CRC 3242) except flecks of blood more frequent and more distributed throughout pulp; not highly pigmented; flavor like sweet orange; few to moderate number of seeds. Tree. Cultivar. Cutting.
- PI 539554 Citrus sinensis (L.) Osbeck RUTACEAE Blood orange donor id: CRC 3830. origin: UNKNOWN. cultivar: Moro. pedigree: Open pollinated seedling. local name: Moro, Belladonna Sanguigno. remarks: See The Citrus Industry, Vol 1, p 473. Appears identical to CRC 3811 (Moro); nearly seedless; flavor fair, not as good as Ruby or Tarocco; best external color on north side of trees. Tree. Cultivar. Cutting.
- PI 539555 Citrus sinensis (L.) Osbeck RUTACEAE Blood orange donor id: CRC 3976. origin: UNKNOWN. cultivar: Sanguinelli. local name: Spanish Sanguinelli. Tree. Cultivar. Cutting.
- PI 539556 Citrus sinensis (L.) Osbeck RUTACEAE Blood orange donor id: CRC 3977. origin: UNKNOWN. cultivar: Washington Sanguine. local name: Doublefina Amelioree. remarks: See The Citrus Industry, Vol 1, p 472. Tree. Cultivar. Cutting.
- PI 539557 Citrus sinensis (L.) Osbeck RUTACEAE Blood orange donor id: CRC 4000. origin: UNKNOWN. cultivar: Sanguina Doble Fina. local name: Sanguina Doble Fina. Tree. Cultivar. Cutting.

- PI 539558 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 1203. origin: UNKNOWN. cultivar: Vari. remarks: Ornamental, progeny tree from limb variation of Washington navel. Variegated foliage attractive, but fruit very small, light colored, seedy, sour. Navel structure very small to non-existent. Tree. Cultivar. Cutting.
- PI 539559 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 1241-A. origin: UNKNOWN. cultivar: Parent Washington. local name: Washington navel. remarks: Mild strain of exocortis 1985. Tree. Cultivar. Cutting.
- PI 539560 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 1241-B. origin: UNKNOWN. cultivar: Parent Washington. local name: Washington navel. remarks: Mild exocortis removed by shoot tip grafting 1985. Tree. Cultivar. Cutting.
- PI 539561 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 1379. origin: UNKNOWN. cultivar: Golden Nugget. remarks: Psorosis and exocortis removed by shoot tip grafting 1985. Described in The Citrus Industry, Vol 1, p 487, as weak-growing, small, and drooping. Tree. Cultivar. Cutting.
- PI 539562 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 1381. origin: UNKNOWN. cultivar: Corrugated Thomson. local name: Thomson. remarks: Exocortis removed by shoot tip grafting 1985. Tree. Cultivar. Cutting.
- PI 539563 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 2008. origin: UNKNOWN. cultivar: Carter. local name: Carter Navel. remarks: Originated in Sierra Madre, California. Thin-skinned and very sweet. Trees have borne abundant crops. Tree. Cultivar. Cutting.
- PI 539564 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 3014. origin: UNKNOWN. cultivar: Newhall. remarks: Fruit more oblong and deeper orange color than regular Washington navel. Exocortis removed by shoot tip grafting 1986. Fruit typical of Newhall--good color, elongate, good flavor. Tree. Cultivar. Cutting.
- PI 539565 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 3017. origin: UNKNOWN. cultivar: Gillette. local name: Washington seedy navel. remarks: Larger, darker green, coarser leaves than regular navel. Fruit tends to be a little larger, a little coarser than regular navel. May be tetraploid. Exocortis removed by shoot tip grafting 1986. Tree. Cultivar. Cutting.

- PI 539566 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 3033. origin: UNKNOWN. cultivar: Frost Washington. local name: Frost nucellar Washington navel. Tree. Cultivar.
- PI 539567 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 3135. origin: UNKNOWN. cultivar: Fischer. local name: Fisher navel. Tree. Cultivar. Cutting.
- PI 539568 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 3305. origin: UNKNOWN. cultivar: Navel. pedigree: PI 44944-A Open pollinated seedling. remarks: Exocortis removed by shoot tip grafting 1986. Typical young budline navel. Good fruit size, large navel structure, rind rough, ridged at stem end. Usual internal navel orange appearance and flavor. Most fruits seedless. Tree. Cultivar. Seed.
- PI 539569 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 3306. origin: UNKNOWN. pedigree: PI 44944-B Open pollinated seedling. remarks: Seedling yellows removed by shoot tip grafting 1986. Nice appearing fruit for young budline. Flavor still tart like Lane Late. Tree. Seed.
- PI 539570 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 3307. origin: UNKNOWN. cultivar: Dream. pedigree: Open pollinated seedling. remarks: Described in The Citrus Industry, Vol 1, p 486. Tree. Cultivar. Seed.
- PI 539571 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 3315. origin: UNKNOWN. cultivar: Rio Grande. pedigree: Open pollinated seedling. Tree. Cultivar. Seed.
- PI 539572 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 3320. origin: UNKNOWN. cultivar: Workman. pedigree: Open pollinated seedling. local name: Summernavel. remarks: Described in The Citrus Industry, Vol 1, p 448. Tree. Cultivar. Seed.
- PI 539573 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 3354. origin: UNKNOWN. cultivar: Dry. pedigree: seedling of C. sinensis 'Navelencia'. remarks: See The Citrus Industry, Vol 1, p 487. Dry, inedible, no juice. Tree. Cultivar. Seed.

- PI 539574 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 3645. origin: UNKNOWN. cultivar: Fischer. pedigree: Open pollinated seedling. local name: Fisher navel orange. remarks: See The Citrus Industry, Vol 1, p 485. Tree. Cultivar. Seed.
- PI 539575 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 3732. origin: UNKNOWN. cultivar: Cluster sport. local name: Cluster navel orange. remarks: Inherently weak-growing with tendency toward branch and limb dieback. One tree died; other had many branches die. Heavy crop of small, off-bloom fruit. Tree. Cultivar. Cutting.
- PI 539576 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 3792. origin: UNKNOWN. cultivar:
 Robertson. local name: Robertson old budline navel. remarks: Citron viroid or exocortis removed by shoot tip grafting. See The Citrus Industry, Vol 1, pp 482-3.
 Tree. Cultivar. Cutting.
- PI 539577 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 3903. origin: UNKNOWN. cultivar: Fukumoto. local name: Fukumoto navel. remarks: Had thermotherapy to eliminate tristeza. Tree. Cultivar. Cutting.
- PI 539578 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 3964. origin: UNKNOWN. cultivar: Palmer. local name: Palmer nucellar navel orange. remarks: In South Africa reported more vigorous than Washington navel, more erect; bears very good crops; high temperature during fruit set can cause excessive fruit drop and oversize fruit. Tree. Cultivar. Cutting.
- PI 539579 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 3971. origin: UNKNOWN. cultivar: Skaggs Bonanza. local name: Skaggs Bonanza navel. remarks: See Citrograph, Dec. 1985. Tree. Cultivar. Cutting.
- PI 539580 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 3994. origin: UNKNOWN. cultivar: Cara Cara. local name: Cara Cara red navel orange. remarks: Originally from Venezuela. Said to be chimera; could revert to non-pink fruit. Tree. Cultivar. Cutting.

- PI 539581 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 574. origin: UNKNOWN. cultivar: Smith's Early. local name: Navelina. remarks: Grown in Spain under "Navelina". Slightly pear-shaped fruit, very smooth skin, texture somewhat ricey, low acid, small navel, almost resembles Thomson navel. Psorosis and exocortis removed by shoot tip grafting 1985. Rind smooth like Leng but not thin like Leng; flesh coarser. Fruit size probably better than Leng; may hold better on tree. Tree. Cultivar. Cutting.
- PI 539582 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 588. origin: UNKNOWN. cultivar: Golden Buckeye. local name: Buckeye. remarks: Psorosis removed by thermotherapy 1985. Trees small, appear to be weak-growing. Light rind color, but most fruits have 1 to 3 thin, raised, darker orange ribs running the length of fruit. Rind may be somewhat thinner than most navels; otherwise fruit is navel-like inside. Tree. Cultivar. Cutting.
- PI 539583 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 609. origin: UNKNOWN. cultivar: McFadden. local name: McFadden ribbed navel. remarks: Psorosis and exocortis removed by shoot tip grafting 1985. No ribs; CRC 588, Golden Buckeye, much better example of ribbing in navels. Tree. Cultivar. Cutting.
- PI 539584 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 65. origin: UNKNOWN. cultivar: Seedy Navel. pedigree: Open pollinated seedling. remarks: Psorosis and exocortis removed by shoot tip grafting. Very similar to CRC 956. Tree. Cultivar. Seed.
- PI 539585 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 956. origin: UNKNOWN. cultivar:
 Washington Seedy. pedigree: Open pollinated seedling.
 local name: Washington navel. remarks: Seedy, fruit large--looks like typical navel. This and CRC 65 very similar. Tree. Cultivar. Cutting.
- PI 539586 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 969. origin: UNKNOWN. cultivar: Thomson. remarks: Exocortis removed by shoot tip grafting 1985.

 Tree. Cultivar. Cutting.
- PI 539587 Citrus sinensis (L.) Osbeck RUTACEAE Navel orange donor id: CRC 983. origin: UNKNOWN. cultivar: Thomson. remarks: Exocortis removed by shoot tip grafting 1985. Smoother rind than most navels; fruit size a bit smallish. Tree. Cultivar. Cutting.

- PI 539588 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 1106. origin: UNKNOWN. cultivar: Koethen. remarks: Fruits seedy, possibly of interest as rootstock. Typical mid-season, seedy sweet orange. Tree. Cultivar. Cutting.
- PI 539589 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 1512. origin: UNKNOWN. cultivar: Bidwells Bar. pedigree: Open pollinated seedling. local name: Oroville Sweet. remarks: Seedling yellows removed by thermotherapy 1985. Typical seedy, mid-season sweet orange. Tree. Cultivar. Cutting.
- PI 539590 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 1693. origin: UNKNOWN. cultivar: Bessie. local name: Bessie. remarks: Seedling yellows removed by thermotherapy 1985. Typical mid-season, seedy sweet orange. This and CRC 245 appear alike. Tree. Cultivar. Seed.
- PI 539591 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 1696. origin: UNKNOWN. cultivar:

 Homosassa. pedigree: Open pollinated seedling. remarks:
 Typical mid-season, seedy sweet orange. This and CRC 292 appear alike. Tree. Cultivar. Seed.
- PI 539592 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 2369. origin: UNKNOWN. cultivar: East Highlands. remarks: Typical mid-season, seedy sweet orange. Tree. Cultivar. Cutting.
- PI 539593 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 2373. origin: UNKNOWN. cultivar:

 Dalandan. remarks: Exocortis removed by shoot tip grafting 1985. Typical mid-season, seedy sweet orange.

 Tree. Cultivar. Cutting.
- PI 539594 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 245. origin: UNKNOWN. cultivar: Bessie. remarks: Exocortis removed by shoot tip grafting 1985. Typical mid-season, seedy sweet orange. This and CRC 1693 appear alike. Tree. Cultivar. Cutting.
- PI 539595 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 2550. origin: UNKNOWN. cultivar:
 Wetumpka. pedigree: Open pollinated seedling. remarks:
 Nice flavor; much fruit on ground 3/87; typical seedy sweet orange, probably late maturing. Tree. Cultivar. Seed.

- PI 539596 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 2602. origin: UNKNOWN. cultivar: Diller. remarks: Exocortis removed by shoot tip grafting 1986. Appears to be typical mid-season, seedy, sweet orange. Tree. Cultivar. Cutting.
- PI 539597 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 274. origin: UNKNOWN. cultivar: Maltese Oval. local name: Mediterranean. remarks: Seedling yellows removed by thermotherapy 1985. Appears identical to CRC 590. Most fruits more round than oval; mid-season, good flavor. Tree. Cultivar. Cutting.
- PI 539598 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 2802. origin: UNKNOWN. cultivar: Argentina. remarks: Typical seedy, mid-season sweet orange. Tree. Cultivar. Seed.
- PI 539599 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 281. origin: UNKNOWN. cultivar: Joppa. local name: Joppa Late. remarks: Exocortis removed by shoot tip grafting 1985. Looks similar externally to Jaffa (CRC 71) but Jaffa seedier, sweeter. Both typical sweets, not Shamouti-like. Tree. Cultivar. Cutting.
- PI 539600 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 2856. origin: UNKNOWN. cultivar: Cadenera Fina. local name: Cadenera, Orero, Precoce Valencia. remarks: Exocortis removed by shoot tip grafting 1986. Large, vigorous tree. Typical seedy sweet orange with small fruit size 1988; early ripening. Appears identical to CRC 3632, except that 2856 a bit tarter. Tree. Cultivar.
- PI 539601 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 287. origin: UNKNOWN. cultivar:

 Navelencia. remarks: Psorosis and exocortis removed by thermotherapy and shoot tip grafting 1985. Tree.

 Cultivar. Cutting.
- PI 539602 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 292. origin: UNKNOWN. cultivar: Homosassa. remarks: Exocortis removed by shoot tip grafting 1985. Typical mid-season, seedy sweet orange. This and CRC 1696 appear alike. Tree. Cultivar. Cutting.

- PI 539603 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3083. origin: UNKNOWN. cultivar: Sathgudi. pedigree: Open pollinated seedling. local name: Sathgudi sweet. remarks: Reported to be early-maturing, commercial variety in India. Seedling yellows removed by thermotherapy 1986. Medium-sized orange fruit, deep orange rind; seedy; tart. Tree. Cultivar. Seed.
- PI 539604 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3181. origin: UNKNOWN. cultivar: Ruvel. pedigree: C. sinensis 'Frost' x C. sinensis 'Rubidoux'. remarks: Psorosis removed by thermotherapy 1986. Tree. Cultivar. Seed.
- PI 539605 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3182. origin: UNKNOWN. cultivar: Trovita strain A. local name: Early. remarks: Decent sized sweet, good color and flavor but seedy. Tree. Cultivar. Seed.
- PI 539606 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 321. origin: UNKNOWN. cultivar: Imperial Variegated. remarks: Originally from Rio de Janeiro, Brazil. Alternating stripes of light and green before maturity, leaves ornamental. Exocortis and probably seedling yellows removed by shoot tip grafting 1985. Variegated fruit with corrugated rind and varying color stripes; flavor fair; might have ornamental potential; moderately seedy. Tree. Cultivar. Cutting.
- PI 539607 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3245. origin: UNKNOWN. cultivar: Capucin. local name: Capucin sweet orange. remarks: Exocortis removed by shoot tip grafting 1986. Tree. Cultivar. Cutting.
- PI 539608 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3251. origin: UNKNOWN. cultivar: Khailily. local name: Khailily. remarks: From Egypt. Trees, fruit look like Shamouti (CRC 3746). Tree. Cultivar. Cutting.
- PI 539609 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3272. origin: UNKNOWN. cultivar: Berna. pedigree: Open pollinated seedling. local name: Berna sweet orange. remarks: From Spain; typical Spanish variety. Exocortis removed by shoot tip grafting 1986. Described in Citrus Industry, Vol 1, pp 443-444. Sour; rind a bit thicker than most sweets. Probably identical to Verna, CRC 3807. Tree. Cultivar. Cutting.

- PI 539610 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3347. origin: UNKNOWN. cultivar: Curry. local name: Curry early. remarks: Seedling yellows and exocortis removed by shoot tip grafting 1986. Typical seedy sweet orange. Tree. Cultivar. Cutting.
- PI 539611 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3584. origin: UNKNOWN. cultivar:

 Shamouti. local name: Shamouti, Sarah. remarks: Does not come true to pink fruit color from seed.

 Polyembryonic. Seedling yellows removed by thermotherapy 1986. Foliage like Shamouti; fruit appears identical to Shamouti. Tree. Cultivar. Seed.
- PI 539612 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3599. origin: UNKNOWN. cultivar: Perao. pedigree: Open pollinated seedling. local name: Perao orange. remarks: Trees 12-14 feet high. Valencia-type variety; elongate fruit; thick rind; seedless; fruit and foliage similar to Shamouti; lighter, rougher orange rind; lighter orange flesh; tarter than Shamouti. Tree. Cultivar. Seed.
- PI 539613 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3624. origin: UNKNOWN. cultivar: Orange de Nice. pedigree: Open pollinated seedling. remarks: Typical seedy sweet orange of medium-early maturity; not acidless, although listed in The Citrus Industry, Vol 1, p 469, as acidless. Tree. Cultivar. Seed.
- PI 539614 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3625. origin: UNKNOWN. cultivar: Ovale. pedigree: Open pollinated seedling. local name: Ovale swet orange. remarks: Fruit oval, late maturing, virtually seedless; too elongate to be commercial. See The Citrus Industry, Vol 1, p 109. Tree. Cultivar. Seed.
- PI 539615 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 366. origin: UNKNOWN. cultivar: Star. remarks: Exocortis and seedling yellows removed by shoot tip grafting 1985. Compact tree; fairly large orange; rough, poorly colored rind; seedy; good flavor; mid-season. Tree. Cultivar. Cutting.
- PI 539616 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 371. origin: UNKNOWN. cultivar: Orange of Heaven. local name: Laranga del Ciel (acidless). remarks: Psorosis and severe tristeza removed by shoot tip grafting 1985. Fruit appears very similar to Laranja Lima; see CRC 950. Tree. Cultivar. Cutting.

- PI 539617 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3746. origin: UNKNOWN. cultivar: Shamouti. local name: Shamouti orange. remarks: See The Citrus Industry, Vol 1, pp 451-3. Appears to be typical Shamouti in foliage and fruit characteristics. Tree. Cultivar. Cutting.
- PI 539618 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3754. origin: UNKNOWN. cultivar: Selecta. pedigree: Open pollinated seedling. local name: Selecta orange. remarks: Polyembryonic. See The Citrus Industry, Vol 1, p 451. Medium-size, round orange; light rind color; seedy; still tart late season. Appears identical to CRC 1045. Tree. Cultivar. Seed.
- PI 539619 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3787. origin: UNKNOWN. cultivar: Fuya Menuda. pedigree: Open pollinated seedling. remarks: Ornamental dwarf citrus; polyembryonic; very large tree; fruit is sweet orange; size small; rough rind, puffy; very seedy; tart. Tree. Cultivar. Seed.
- PI 539620 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3801. origin: UNKNOWN. cultivar:
 Vainiglia. local name: Vainiglia Pink sweet orange. remarks: See The Citrus Industry, Vol 1, p 469. Pink color in albedo and flesh next to rind; insipid, virtually acidless. Tree. Cultivar. Cutting.
- PI 539621 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3802. origin: UNKNOWN. cultivar: Akcay Sekeri. local name: Crescent. remarks: Early seedless orange. Tree. Cultivar.
- PI 539622 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3858. origin: UNKNOWN. cultivar:
 Pineapple. pedigree: Open pollinated seedling. local name: Pineapple sweet orange. remarks: See The Citrus Industry, Vol 1, pp 449-450. Typical mid-season seedy sweet orange. Tree. Cultivar. Cutting.
- PI 539623 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3859. origin: UNKNOWN. cultivar: Indian River. pedigree: Open pollinated seedling. local name: Indian River sweet orange. remarks: Most fruit on ground 3/87; typical seedy sweet orange of early maturity; many seeds. Tree. Cultivar. Seed.

- PI 539624 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3860. origin: UNKNOWN. cultivar: Catlin. pedigree: Open pollinated seedling. local name: Catlin sweet orange. remarks: Appears to be fairly typical seedy, mid-season sweet orange. Tree. Cultivar. Seed.
- PI 539625 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3861. origin: UNKNOWN. cultivar: Madam Vinous. pedigree: Open pollinated seedling. local name: Madam Vinous sweet orange. remarks: Nice flavored fruit; much of crop on ground 3/87; typical mid-season, seedy sweet orange. Tree. Cultivar. Cutting.
- PI 539626 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3862. origin: UNKNOWN. cultivar: Hamlin. pedigree: Open pollinated seedling. local name: Hamlin, Norris. remarks: See The Citrus Industry, Vol 1, pp 445-446. Average good size; few seeds; flesh somewhat coarse; good flavor (early). Tree. Cultivar. Seed.
- PI 539627 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3863. origin: UNKNOWN. cultivar:
 Olivelands. pedigree: Open pollinated seedling. local name: Olivelands sweet orange. remarks: Nice flavor; much fruit on ground 3/87; typical mid-season, seedy sweet orange. Tree. Cultivar. Seed.
- PI 539628 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3864. origin: UNKNOWN. cultivar: Pera. pedigree: Open pollinated seedling. local name: Pera orange. remarks: See The Citrus Industry, Vol 1, p 449. Somewhat elongate but not as much as Perao; small size; seedy; no commercial potential. Tree. Cultivar. Seed.
 - PI 539629 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3865. origin: UNKNOWN. cultivar: Marr's Early. pedigree: Open pollinated seedling. local name: Marr's Early sweet orange. remarks: See The Citrus Industry, Vol 1, p 447. Nice flavor; much of crop on ground 3/87; nice appearing, compact trees; good size for sweet orange; early season; few to moderate number of seeds. Tree. Cultivar. Cutting.
 - PI 539630 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3866. origin: UNKNOWN. cultivar: Biondo Comune. pedigree: Open pollinated seedling. local name: Biondo Commune. remarks: See The Citrus Industry, Vol 1, p 444. Typical seedy sweet orange of medium-early maturity; tastes sweeter than most sweets. Tree. Cultivar. Seed.

- PI 539631 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3867. origin: UNKNOWN. cultivar: Rotuma Island. pedigree: Open pollinated seedling. remarks: No blood coloring, no blush on rind; typical mid-season seedy sweet orange of good flavor. Tree. Cultivar. Seed.
- PI 539632 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3868. origin: UNKNOWN. cultivar: Salustiana. pedigree: Open pollinated seedling. local name: Salustiana sweet orange. remarks: See The Citrus Industry, Vol 1, p 451. Typical mid-season seedy sweet orange; tends toward small fruit size; relatively few seeds. Tree. Cultivar. Cutting.
- PI 539633 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3869. origin: UNKNOWN. cultivar: Tahiti. pedigree: Open pollinated seedling. local name: Tahiti sweet orange. remarks: Attractive, medium-large fruit; typical seedy sweet orange; season probably medium/late. Tree. Cultivar. Seed.
- PI 539634 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3870. origin: UNKNOWN. cultivar: Finike. pedigree: Open pollinated seedling. local name: Finike sweet orange. remarks: Typical mid-season, seedy sweet orange. Tree. Cultivar. Seed.
- PI 539635 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3871. origin: UNKNOWN. cultivar:

 Macetera. pedigree: Open pollinated seedling. local name: Macetera sweet orange. remarks: See The Citrus Industry, Vol 1, p 447. Attractive trees; nice fruit size; slightly early maturity; flavor a bit flat; typical seedy sweet orange. Tree. Cultivar. Cutting.
- PI 539636 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3873. origin: UNKNOWN. cultivar: Parson Brown. pedigree: Open pollinated seedling. local name: Parson Browm sweet orange. remarks: See The Citrus Industry, Vol 1, p 449. Typical mid-season, seedy sweet orange, seedier than most sweets. Tree. Cultivar. Seed.
- PI 539637 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3896. origin: UNKNOWN. cultivar: Cipo. pedigree: Open pollinated seedling. local name: Cipo sweet orange. remarks: Originated in Brazil. Low, prostrate tree; branches grow outward, downward; slow-growing; typical mid-season, seedy sweet orange. Tree. Cultivar. Cutting.

- PI 539638 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3921. origin: UNKNOWN. cultivar: Ovale o Calabrese. local name: Ovale o Calabrese sweet orange. Tree. Cultivar. Seed.
- PI 539639 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3933. origin: UNKNOWN. Tree. Seed.
- PI 539640 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3934. origin: UNKNOWN. Tree. Seed.
- PI 539641 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3935. origin: UNKNOWN. cultivar:
 Jincheng. local name: Jincheng sweet orange. Tree.
 Cultivar. Seed.
- PI 539642 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3936. origin: UNKNOWN. cultivar: Xuegan. local name: Xuegan sweet orange. Tree. Cultivar. Seed.
- PI 539643 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3937. origin: UNKNOWN. cultivar: Xinhuicheng. local name: Xinhuicheng sweet orange. Tree. Cultivar. Seed.
- PI 539644 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3982. origin: UNKNOWN. cultivar: Xianfengcheng. Tree. Cultivar. Cutting.
- PI 539645 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3983. origin: UNKNOWN. cultivar: Jincheng. Tree. Cultivar. Cutting.
- PI 539646 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3984. origin: UNKNOWN. cultivar: Xuegan. Tree. Cultivar. Cutting.
- PI 539647 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 3985. origin: UNKNOWN. cultivar: Xinhuicheng. Tree. Cultivar.
- PI 539648 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 4002. origin: UNKNOWN. cultivar: Ambersweet. local name: Ambersweet. Tree. Cultivar. Cutting.

- PI 539649 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 590. origin: UNKNOWN. cultivar: Maltese Oval. local name: Mediterranean Sweet. remarks: Garey's Mediterranean sweet, considered by Florida growers as identical to Maltese oval. This and CRC 274 seem the same. Tree and foliage very characteristic. Psorosis and seedling yellows removed by thermotherapy 1985. Tree. Cultivar. Cutting.
- PI 539650 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 591. origin: UNKNOWN. cultivar: St. Michael Paperrind. local name: Paperrind. remarks: Seedling yellows removed by thermotherapy 1985. Small-sized fruit; rind fairly thin. Fruit fits Citrus Industry description quite well. Tree. Cultivar. Cutting.
- PI 539651 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange donor id: CRC 71. origin: UNKNOWN. cultivar: Jaffa. remarks: Psorosis, exocortis, and seedling yellows removed by shoot tip grafting 1985. Jaffa and Joppa look similar externally, but Jaffa seedier and sweeter. Typical sweet, not Shamouti-like. Tree. Cultivar. Cutting.
- PI 539652 Citrus sinensis (L.) Osbeck RUTACEAE Valencia orange donor id: CRC 1240. origin: UNKNOWN. cultivar: Fuzzy Valencia. pedigree: bud sport. local name: Fuzzy Valencia. remarks: Peculiar spine-like projections on more or less of the surface, especially in depressed circular ring about blossom end. Tree. Cultivar. Cutting.
- PI 539653 Citrus sinensis (L.) Osbeck RUTACEAE Valencia orange donor id: CRC 1518. origin: UNKNOWN. cultivar: Coarse Valencia. local name: Valencia. remarks: Very coarse, convoluted. Psorosis and exocortis removed by shoot tip grafting 1985. Tree. Cultivar. Cutting.
- PI 539654 Citrus sinensis (L.) Osbeck RUTACEAE Valencia orange donor id: CRC 2689. origin: UNKNOWN. cultivar: San Marino. Tree. Cultivar. Cutting.
- PI 539655 Citrus sinensis (L.) Osbeck RUTACEAE Valencia orange donor id: CRC 272. origin: UNKNOWN. cultivar: Valencia. remarks: Seedling yellows removed by thermotherapy. Tree. Cultivar. Cutting.
- PI 539656 Citrus sinensis (L.) Osbeck RUTACEAE Valencia orange donor id: CRC 2750. origin: UNKNOWN. cultivar: Olinda. local name: Olinda. Tree. Cultivar. Cutting.

- PI 539657 Citrus sinensis (L.) Osbeck RUTACEAE Valencia orange donor id: CRC 2776. origin: UNKNOWN. cultivar: Seedless Valencia. remarks: Exocortis removed by shoot tip grafting 1986. Tree. Cultivar. Cutting.
- PI 539658 Citrus sinensis (L.) Osbeck RUTACEAE Valencia orange donor id: CRC 3025. origin: UNKNOWN. cultivar: Lue Gim Gong. pedigree: Open pollinated seedling. remarks: Seedling yellows removed by thermotherapy 1986. Tree. Cultivar. Seed.
- PI 539659 Citrus sinensis (L.) Osbeck RUTACEAE Valencia orange donor id: CRC 3030. origin: UNKNOWN. cultivar: Cutter. local name: Cutter nucellar. Tree. Cultivar. Seed.
- PI 539660 Citrus sinensis (L.) Osbeck RUTACEAE Valencia orange donor id: CRC 3031. origin: UNKNOWN. cultivar: Frost. local name: Frost nucellar Valencia. Tree. Cultivar. Seed.
- PI 539661 Citrus sinensis (L.) Osbeck RUTACEAE Valencia orange donor id: CRC 3032. origin: UNKNOWN. cultivar: Campbell. local name: Campbell Valencia. Tree. Cultivar. Seed.
- PI 539662 Citrus sinensis (L.) Osbeck RUTACEAE Valencia orange donor id: CRC 314. origin: UNKNOWN. cultivar: Hart's Late. local name: Hart's Late valencia. Tree. Cultivar. Cutting.
- PI 539663 Citrus sinensis (L.) Osbeck RUTACEAE Valencia orange donor id: CRC 3339. origin: UNKNOWN. cultivar: Werley. remarks: Matures in April; larger than Valencia; nearly seedless; texture excellent; smooth, thin skin. Tree. Cultivar. Seed.
- PI 539664 Citrus sinensis (L.) Osbeck RUTACEAE Valencia orange donor id: CRC 3955. origin: UNKNOWN. cultivar:

 Midknight. remarks: Much slower growing than other Valencias; marked bud union incompatibility on rough lemon; round tree shape; leaf shape large, almost grapefruit-like; similar yields to Valencias of same size; in South Africa excellent size fruit, good round shape, very smooth rind texture, excellent internal quality, high juice percentages and TSS levels, seedless like Delta but slightly tougher rag, can. Tree. Cultivar. Cutting.

- PI 539665 Citrus sinensis (L.) Osbeck RUTACEAE Valencia orange donor id: CRC 3963. origin: UNKNOWN. cultivar: Delta. local name: Delta seedless. remarks: In South Africa reported similar in vigor to other Valencias but more erect; very good yields; TSS levels slightly lower than other Valencias, esp. on vigorous rootstocks like rough lemon; on Troyer eating quality very good; can be picked 2-3 weeks earlier than other Valencias; seedless; smooth rind. Tree. Cultivar. Cutting.
- PI 539666 Citrus sinensis (L.) Osbeck RUTACEAE Valencia orange donor id: CRC 3995. origin: UNKNOWN. cultivar: Rhode Red. local name: Rhode Red Valencia. remarks: Said to be chimera; could revert to normal Valencia. Tree. Cultivar. Cutting.
- PI 539667 Citrus sinensis (L.) Osbeck RUTACEAE Valencia orange donor id: CRC 4001. origin: UNKNOWN. cultivar: Variegated Valencia. local name: Variegated Valencia orange. Tree. Cultivar. Cutting.
- PI 539668 Citrus sinensis (L.) Osbeck RUTACEAE Valencia orange donor id: CRC 570. origin: UNKNOWN. cultivar: Hart's Tardiff. remarks: Exocortis removed by shoot tip grafting 1985. Tree. Cultivar. Cutting.
- PI 539669 Citrus sinograndis hort. ex Yuich. Tanaka RUTACEAE
 Pummelo
 donor id: CRC 3148. origin: UNKNOWN. pedigree: Open
 pollinated seedling. local name: Otomikan. remarks:
 Large, yellow fruit, globose, some flattened at both
 ends; thick rind; large, hollow core; seedy; flesh
 yellowish/white, coarse-appearing, sour. Tree. Seed.
- PI 539670 Citrus sp. RUTACEAE Lemon hybrid
 donor id: CRC 3765. origin: UNKNOWN. pedigree: Open
 pollinated seedling. local name: "lemon hybrid".
 remarks: Fruits from Sabak, North Borneo. Smooth, thin,
 tightly adherent rind with large, prominent oil glands;
 bitter, acrid, inedible flesh; medium size; yellow; round
 with flattened base and blunt nose surrounded by
 depressed ring; seedy; flesh ricey, white to yellow, very
 sour. Polyembryonic. Appears identical to C. excelsa (CRC
 2316). Tree. Seed.
- PI 539671 Citrus sp. RUTACEAE Papeda
 donor id: CRC 3793. origin: UNKNOWN. remarks: Wide,
 winged petioles; fruit about size and shape of Bearss
 lime, with ridged neck; very smooth, thin, yellow rind;
 green flesh, very sour; probably seedless. Tree. Seed.

- PI 539672 Citrus sp. RUTACEAE Papeda
 donor id: CRC 3797. origin: UNKNOWN. local name: Honghe
 papeda. remarks: Monoembryonic? Tall, vigorous, upright
 trees; foliage like C. ichangensis, petiole twice length
 of leaf blade. Tree. Seed.
- PI 539673 Citrus sp. RUTACEAE
 donor id: CRC 3979. origin: UNKNOWN. cultivar:
 Anseikan. Tree. Cultivar. Cutting.
- PI 539674 Citrus sp. RUTACEAE Papeda
 donor id: CRC 3943. origin: UNKNOWN. cultivar: Kabosu.
 remarks: Tristeza removed by thermotherapy. received as:
 Citrus sphaerocarpa. Tree. Cultivar. Cutting.
- PI 539675 Citrus succosa hort. ex T. Tanaka RUTACEAE Mandarin donor id: CRC 3280. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Jimikan. remarks: From Japan. Looks like Sanbokan; large, rough, thick-rind; yellow fruit; flavor palatable. Tree. Cutting.
- PI 539676 Citrus sudachi hort. ex Shirai RUTACEAE Papeda hybrid donor id: CRC 3471. origin: UNKNOWN. pedigree: C. ichangensis x?. local name: Sudachi. remarks: See The Citrus Industry, Vol 1, p 368. In Japan: small fruit resembling Yuzu, reddish-orange; leaves similar to Yuzu; resistant to citrus canker, gummosis, citrus root borer. Growth slow, may have dwarfing characteristics; long-lived. Tree. Seed.
- PI 539677 Citrus sulcata hort. ex I. Takah. RUTACEAE Grapefruit hybrid donor id: CRC 3257. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Sanbokan. remarks: From Japan. Tree rather big, cold-tolerant; medium size fruit; seeds numerous; polyembryonic; leaves small, petiole shorter than average, slightly winged; flavor somewhat lemon-like but sweeter. Tree. Cutting.
- PI 539678 Citrus sunki (Hayata) hort. ex T. Tanaka RUTACEAE
 Mandarin
 donor id: CRC 3143. origin: UNKNOWN. local name:
 Mandarin Sunki, Suenkat ou sunkat. remarks: Small, sour
 mandarin. Tree. Seed.
- PI 539679 Citrus tachibana (Makino) T. Tanaka RUTACEAE Mandarin donor id: CRC 3150. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Tachibana orange. remarks: Very small, moderately sour mandarin. Tree. Cutting.

- PI 539680 Citrus taiwanica T. Tanaka & Shimada RUTACEAE Sour orange donor id: CRC 2588. origin: UNKNOWN. cultivar: Nansho daidai. remarks: About half of crop on ground 2/88. Fruit about grapefruit sized; rind dark yellow, moderately rough and pebbled, moderately thick; seedy; flesh lemon yellow to light orange/yellow; juicy, sour. Tree. Cultivar. Cutting.
- PI 539681 Citrus taiwanica T. Tanaka & Shimada RUTACEAE Sour orange donor id: CRC 656. origin: UNKNOWN. cultivar: Daidai. remarks: Said to have come from Brazil. Identified by Dr. Tanaka in 12/28 as Daidai, one of the most commonly used Japanese stocks. Exocortis and seedling yellows removed by shoot tip grafting 1985. Calyx hangs on tree after fruit falls. Slightly thicker rind than most sours on average. Tree. Cultivar. Cutting.
- PI 539682 Citrus tamurana hort. ex T. Tanaka RUTACEAE Grapefruit hybrid donor id: CRC 3092. origin: UNKNOWN. cultivar: Hyuganatsu. local name: New summer orange, Hyuga natsumikan. remarks: Large, yellow-fleshed fruit. Borderline edible/sour; fruit mostly pummelo-like; foliage sweet orange-like. Tree. Cultivar. Seed.
- PI 539683 Citrus tangerina hort. ex T. Tanaka RUTACEAE Mandarin donor id: CRC 3026. origin: UNKNOWN. cultivar: Dancy (Frost nucellar). local name: Frost Dancy. Tree. Cultivar. Seed.
- PI 539684 Citrus tardiva hort. ex Shirai RUTACEAE Mandarin donor id: CRC 3297. origin: UNKNOWN. local name: Giri-mikan. remarks: Medium-small, sour mandarin. Tree. Cutting.
- PI 539685 Citrus temple hort. ex Yuich. Tanaka RUTACEAE Tangor donor id: CRC 2598. origin: UNKNOWN. cultivar: Temple. pedigree: C. reticulata x C. sinensis (unknown cultivars). local name: Temple tangor, Royal mandarin. remarks: Exocortis removed by shoot tip grafting. Tree. Cultivar. Cutting.
- PI 539686 Citrus tengu hort. ex T. Tanaka RUTACEAE Pummelo hybrid donor id: CRC 3464. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Shigelom, Kinkuneba, Tengumikan. remarks: Medium-large, dark orange fruit; somewhat like large navel orange; globose to pyriform; rind thick; flesh orange, a bit coarse; seedy; nice flavor; juice percentage low. Tree. Seed.

- PI 539687 Citrus ujukitsu T. Tanaka RUTACEAE Sweet orange hybrid donor id: CRC 3467. origin: UNKNOWN.... pedigree: Open pollinated seedling. local name: Ujukitsu, Bushukan, Tsurukan. remarks: Small to medium-sized fruit, round to pyriform; medium yellow, fairly smooth, moderately thick rind; seedy; flesh light orange, juicy, melting, palatable, slightly tart. Tree. Seed.
- PI 539688 Citrus unshiu Marcov. RUTACEAE Mandarin donor id: CRC 1851. origin: UNKNOWN. cultivar: Kawano Wase. local name: Kawano Wase Satsuma. remarks: Seedling yellows removed by thermotherapy 1985. Kawano-wase is not among major Wase strains listed in Citrus Industry, Vol 1, pp 502-503. Tree. Cultivar. Cutting.
- PI 539689 Citrus unshiu Marcov. RUTACEAE Mandarin donor id: CRC 3178. origin: UNKNOWN. cultivar: Frost #1 Owari. local name: Frost Owari Satsuma. Tree. Cultivar. Seed.
- PI 539690 Citrus unshiu Marcov. RUTACEAE Mandarin donor id: CRC 3848. origin: UNKNOWN. cultivar:
 Nepolitana. local name: n/q. remarks: Fruit appears identical to Frost Owari Satsuma at Lindcove, California.
 Tree. Cultivar. Seed.
- PI 539691 Citrus vitiensis T. Tanaka RUTACEAE Pummelo hybrid donor id: CRC 579. origin: UNKNOWN. cultivar: Moli kurikuri. pedigree: C. macroptera x C. maxima (unknown cultivar). remarks: Exocortis mostly removed by shoot tip grafting; still has very mild strain. Medium-small for a pummelo; broad pyriform shape with distinct neck, broad nipple and small persistent style; medium-yellow, medium-thick, smooth rind; flesh pale yellow, sour now, moderately seedy. May be pummelo hybrid. Tree. Cultivar. Cutting.
- PI 539692 Citrus webberi Wester RUTACEAE Lime
 donor id: CRC 1455. origin: UNKNOWN. cultivar: Kalpi.
 local name: Kalpi, Nogapog, Webber's Phil. hybr.
 remarks: According to Citrus Industry, Vol 1, p 397,
 seems to be hybrid of C. macroptera and common Philippine
 mandarin. See CRC 767 and 1456. Fruit description in C.I.
 does not fit well; perhaps it is climate effect. Fruit
 falling while still green. Flesh very dry, virtually no
 juice. Foliage has very wide petiole--almost like C.
 ichangensis. Fruit of this and CRC 1456 appears
 identical, but trees of 1455 have. Tree. Cultivar.
 Cutting.

- PI 539693 Citrus webberi Wester RUTACEAE Lime
 donor id: CRC 1456. origin: UNKNOWN. cultivar: Kalpi.
 local name: Kalpi, Nogapog, Webber's Phil. hybr. Tree.
 Cultivar. Cutting.
- PI 539694 Citrus westeri T. Tanaka RUTACEAE Papeda
 donor id: CRC 3605. origin: UNKNOWN. local name:
 Samuyao. remarks: Probably monembryonic. See The Citrus
 Industry, Vol 1, pp 393-394. Flavor not good. received
 as: Citrus micrantha var. microcarpa. Tree. Seed.
- PI 539695 Citrus x tangelo J. Ingram & H. Moore RUTACEAE Tangelo donor id: CRC 2011. origin: UNKNOWN. cultivar: San Jacinto. pedigree: C. paradisi (unknown cultivar) x C. tangerina. Tree. Cultivar. Cutting.
- PI 539696 Citrus x tangelo J. Ingram & H. Moore RUTACEAE Tangelo donor id: CRC 2012. origin: UNKNOWN. cultivar: Wekiwa. pedigree: C. paradisi (unknown cultivar) x C. x tangelo 'Sampson'. local name: Pink tangelo. remarks: Small yellow fruit, yellow flesh, seedy, slightly tart flavor. Tree. Cultivar. Cutting.
- PI 539697 Citrus x tangelo J. Ingram & H. Moore RUTACEAE Tangelo donor id: CRC 2013. origin: UNKNOWN. cultivar: Thorton. pedigree: C. paradisi (unknown cultivar) x C. tangerina. remarks: Medium-sized orange fruit--rough and ugly, tart, moderately seedy. Tree. Cultivar. Cutting.
- PI 539698 Citrus x tangelo J. Ingram & H. Moore RUTACEAE Tangelo donor id: CRC 2418. origin: UNKNOWN. cultivar: Sampson. pedigree: C. paradisi (unknown cultivar) x C. tangerina. local name: Sampson. Tree. Cultivar. Plant.
- PI 539699 Citrus x tangelo J. Ingram & H. Moore RUTACEAE Tangelo donor id: CRC 2543. origin: UNKNOWN. cultivar: Sexton. pedigree: C. paradisi x C. reticulata (unknown cultivars) Open pollinated seedling. Tree. Cultivar. Seed.
- PI 539700 Citrus x tangelo J. Ingram & H. Moore RUTACEAE Tangelo donor id: CRC 2559. origin: UNKNOWN. cultivar: Yalaha. pedigree: C. paradisi 'Duncan' x C. tangerina. remarks: Small fruit with very heavy crop. Medium orange rind, orange flesh; too tart even though many fruit have dropped; very seedy. Tree. Cultivar. Cutting.
- PI 539701 Citrus x tangelo J. Ingram & H. Moore RUTACEAE Tangelo donor id: CRC 2586. origin: UNKNOWN. cultivar: Siamelo. pedigree: C. paradisi x C. reticulata (unknown cultivars). remarks: Small to medium orange fruit, sour, seedy. Tree. Cultivar. Cutting.

- PI 539702 Citrus x tangelo J. Ingram & H. Moore RUTACEAE Tangelo donor id: CRC 2603. origin: UNKNOWN. cultivar: Clement. pedigree: C. paradisi 'Duncan' x C. clementina. remarks: Psorosis eliminated by thermotherapy 1986. Very good flavor, would probably make excellent juice; fairly attractive fruit, but is seedy, has thick rind and large hollow center. Tree. Cultivar. Cutting.
- PI 539703 Citrus x tangelo J. Ingram & H. Moore RUTACEAE Tangelo donor id: CRC 2604. origin: UNKNOWN. cultivar: Seminole. pedigree: C. paradisi 'Duncan' x C. tangerina. remarks: Crop large, fruit small 1987. Tree. Cultivar. Cutting.
- PI 539704 Citrus x tangelo J. Ingram & H. Moore RUTACEAE Tangelo donor id: CRC 2606. origin: UNKNOWN. cultivar: Sunrise. pedigree: C. paradisi 'Duncan' x C. tangerina. remarks: Medium-large; medium orange rind color with reddish blush; peels and sections readily; flavor good, slightly tart; seeds small, few to moderate number. Tree. Cultivar. Cutting.
- PI 539705 Citrus x tangelo J. Ingram & H. Moore RUTACEAE Tangelo donor id: CRC 2609. origin: UNKNOWN. cultivar: Sacaton. pedigree: C. paradisi x C. reticulata (unknown cultivars). remarks: Medium-sized fruit, yellow to medium orange; peels and sections readily; flavor sweet and refreshing; few to moderate number of seeds. Tree. Cultivar. Cutting.
- PI 539706 Citrus x tangelo J. Ingram & H. Moore RUTACEAE Tangelo donor id: CRC 2746. origin: UNKNOWN. cultivar: Webber. pedigree: C. paradisi 'Duncan' x C. tangerina. remarks: Medium-small fruit, light to medium orange rind, orange flesh, tart, seedy. Tree. Cultivar. Seed.
- PI 539707 Citrus x tangelo J. Ingram & H. Moore RUTACEAE Tangelo donor id: CRC 2849. origin: UNKNOWN. cultivar: Pearl. pedigree: C. paradisi 'Imperial' x C. deliciosa. remarks: Hybrid of Imperial grapefruit x Willowleaf mandarin. Tree. Cultivar.
- PI 539708 Citrus x tangelo J. Ingram & H. Moore RUTACEAE Tangelo donor id: CRC 3331. origin: UNKNOWN. cultivar: Sacaton. pedigree: C. paradisi x C. reticulata Open pollinated seedling. remarks: Large fruit; yellow to orange rind color; peels and sections well; tart, grapefruit-like flavor; seedy. Tree. Cultivar. Seed.

- PI 539709 Citrus x tangelo J. Ingram & H. Moore RUTACEAE Tangelo donor id: CRC 3340. origin: UNKNOWN. cultivar:

 Minneola. pedigree: C. paradisi 'Duncan' x C. tangerina.
 local name: Minneola tangelo. remarks: See The Citrus
 Industry, Vol 1, pp 528-529. Tree. Cultivar. Cutting.
- PI 539710 Citrus x tangelo J. Ingram & H. Moore RUTACEAE Tangelo donor id: CRC 3616. origin: UNKNOWN. cultivar: Page. pedigree: C. x tangelo 'Minneola' x C. clementina. remarks: See The Citrus Industry, Vol 1, pp 519-520. Resembles sweet orange; too small fruit to have commercial promise. Tree. Cultivar. Cutting.
- PI 539711 Citrus x tangelo J. Ingram & H. Moore RUTACEAE Tangelo donor id: CRC 3874. origin: UNKNOWN. cultivar: Orlando. pedigree: C. paradisi 'Duncan' x C. tangerina. local name: Orlando tangelo. remarks: See The Citrus Industry, Vol 1, p 529. Tree. Cultivar. Cutting.
- PI 539712 Citrus yatsushiro hort. ex T. Tanaka RUTACEAE Mandarin donor id: CRC 3466. origin: UNKNOWN. local name:
 Yatsushiro mikan. remarks: In Japan: Fruit oblate, stem end flat, stylar end flattened, slightly depressed; no areole or navel; smooth rind, good orange color; rind 2-3 mm thick; large hollow core; flesh deep orange; average 3 seeds; polyembryonic; flesh juicy, tender, rich no rag; leaves small, elliptical, petiole short, slightly winged. Early, medium-small mandarin type; tried at Lindcove, California, appears to. Tree. Seed.
- PI 539713 Citrus yuko hort. ex T. Tanaka RUTACEAE Papeda hybrid donor id: CRC 3146. origin: UNKNOWN. pedigree: C. ichangensis x C. reticulata (unknown cultivar). local name: Yuko. remarks: Yuzo hybrid character, fruit size good sized Satsuma, shape resembles Kunembo--rough, orange-yellow, calyx provides large disk ring, poor taste, apex rounded, base pointed. Tree. Seed.
- PI 539714 Clausena anisata (Willd.) Hook. f. ex Benth. RUTACEAE Citrus relative donor id: CRC 3788. origin: UNKNOWN. local name: Clausena. remarks: See The Citrus Industry, Vol 1, p 226. Open growth, not attractive tree; few small fruits. Tree. Seed.
- PI 539715 Clausena excavata Burm. f. RUTACEAE Citrus relative donor id: CRC 3899. origin: UNKNOWN. local name: Clausena. remarks: See The Citrus Industry, Vol 1, pp 212-216. Tree. Seed.

- PI 539716 Clausena lansium (Lour.) Skeels RUTACEAE Citrus relative donor id: CRC 1460. origin: UNKNOWN. local name: Wampee. Tree. Cutting.
- PI 539717 Eremocitrus glauca (Lindley) Swingle RUTACEAE Citrus relative donor id: CRC 3463. origin: UNKNOWN. local name: Australian desert lime. remarks: See The Citrus Industry, Vol 1, pp 340-42. Tree. Cutting.
- PI 539718 Esenbeckia hartmanii Robins. & Fern. RUTACEAE Citrus relative donor id: CRC 3824. origin: UNKNOWN. local name: Esenbeckia. remarks: Remote citrus relative; too tender for field in Riverside; kept in greenhouse only. Tree.
- PI 539719 Esenbeckia runyonii Morton RUTACEAE Citrus relative donor id: CRC 3538. origin: UNKNOWN. local name: Esenbeckia. Tree. Cutting.
- PI 539720 Feroniella oblata Swingle RUTACEAE Citrus relative donor id: CRC 3510. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Indo-China feroniella. remarks: Monoembryonic. Too tender for field in Riverside; kept in greenhouse only. See The Citrus Industry, Vol 1, p 418. Tree. Seed.
- PI 539721 Fortunella crassifolia Swingle RUTACEAE Kumquat donor id: CRC 1471. origin: UNKNOWN. cultivar: Meiwa. local name: Meiwa, Neiha, Nimpo. Tree. Cultivar. Cutting.
- PI 539722 Fortunella crassifolia Swingle RUTACEAE Kumquat donor id: CRC 3833. origin: UNKNOWN. cultivar: Meiwa. pedigree: F. japonica x F. margarita ? Open pollinated seedling. local name: Meiwa kumquat. remarks: See The Citrus Industry, Vol 1, p 582. Tree. Cultivar. Cutting.
- PI 539723 Fortunella hindsii (Champ. ex Benth.) Swingle RUTACEAE Kumquat donor id: CRC 3789. origin: UNKNOWN. local name: Hong Kong wild kumquat. Tree. Seed.
- PI 539724 Fortunella hindsii (Champ. ex Benth.) Swingle RUTACEAE Kumquat donor id: CRC 3790. origin: UNKNOWN. cultivar: BB 394. local name: Hong Kong wild kumquat. remarks: Seeds collected from Hong Kong in 1975. Tree. Cultivar. Seed.

- PI 539725 Fortunella hybrid RUTACEAE Kumquat hybrid donor id: CRC 1044. origin: UNKNOWN. Tree. Cutting.
- PI 539726 Fortunella hybrid RUTACEAE Kumquat hybrid donor id: CRC 3759. origin: UNKNOWN. pedigree: C. reticulata 'Dancy' x Fortunella margarita 'Nagami'. local name: Nagami cross. Tree. Cutting.
- PI 539727 Fortunella japonica (Thunb.) Swingle RUTACEAE Kumquat donor id: CRC 3237. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Round kumquat. Tree. Seed.
- PI 539728 Fortunella margarita (Lour.) Swingle RUTACEAE Kumquat donor id: CRC 132. origin: UNKNOWN. cultivar: Nagami. Tree. Cultivar. Cutting.
- PI 539729 Fortunella margarita (Lour.) Swingle RUTACEAE Kumquat donor id: CRC 3877. origin: UNKNOWN. cultivar: Nagami. local name: Nagami kumquat. remarks: See The Citrus Industry, Vol 1, pp 581-582. Tree. Cultivar. Cutting.
- PI 539730 Fortunella obovata Hort. ex T. Tanaka RUTACEAE Kumquat donor id: CRC 3475. origin: UNKNOWN. cultivar:
 Changshou. remarks: In Japan: Light yellow-orange rind; smooth, bell-shaped fruit, stylar end depressed, stem end rounded; flesh orange; core solid; 8-10 seeds, extremely large; rind sweet but somewhat acrid from high oil content. Described as Changshou kumquat in T Citrus Industry, Vol 1, pp 335-6. Tree. Cultivar. Seed.
- PI 539731 Fortunella polyandra (Ridley) T. Tanaka RUTACEAE Kumquat donor id: CRC 3901. origin: UNKNOWN. local name:

 Malayan kumquat. remarks: See The Citrus Industry, Vol 1, p 332. Tropical Fortunella; too tender for field in Riverside, California; kept in greenhouse and lathhouse only. Tree. Seed.
- PI 539732 Limonia acidissima L. RUTACEAE Citrus relative donor id: CRC 3918. origin: UNKNOWN. local name: Indian wood apple. Tree.
- PI 539733 Merrillia caloxylon (Ridley) Swingle RUTACEAE Citrus relative donor id: CRC 3786. origin: UNKNOWN. local name: Flowering Merrillia, Ketenggah. remarks: See The Citrus Industry, Vol 1, pp 241-2. Too tender for field in Riverside; kept in greenhouse only. Tree. Seed.

- PI 539734 Microcitrus australasica (F. Muell.) Swingle RUTACEAE Microcitrus donor id: CRC 1484. origin: UNKNOWN. local name: Australian red pulp finger lime. received as: Microcitrus australasica var. sanguinea. Tree. Cutting.
- PI 539735 Microcitrus australasica (F. Muell.) Swingle RUTACEAE Microcitrus donor id: CRC 3664. origin: UNKNOWN. pedigree: PI 306117 selection. local name: Australian finger lime. remarks: See CRC 3663. USDCS 65-12-2. Tree. Cutting.
- PI 539736 Microcitrus australasica (F. Muell.) Swingle RUTACEAE Microcitrus donor id: CRC 3670. origin: UNKNOWN. local name: Australian finger lime. Tree. Cutting.
- PI 539737 Microcitrus australis (Planchon) Swingle RUTACEAE
 Microcitrus
 donor id: CRC 3666. origin: UNKNOWN. pedigree: PI
 306118 selection. local name: Australian round lime.
 remarks: See CRC 3665. Healthy trees, no dieback. Tree.
 Cutting.
- PI 539738 Microcitrus australis (Planchon) Swingle RUTACEAE Microcitrus donor id: CRC 3667. origin: UNKNOWN. pedigree: PI 306118 selection. local name: Australian round lime. remarks: See CRC 3665. Tree. Cutting.
- PI 539739 Microcitrus australis (Planchon) Swingle RUTACEAE
 Microcitrus
 donor id: CRC 3668. origin: UNKNOWN. pedigree: PI
 306118 selection. local name: Australian round lime.
 remarks: See CRC 3665. Tree. Cutting.
- PI 539740 Microcitrus hybrid RUTACEAE Microcitrus donor id: CRC 1485. origin: UNKNOWN. cultivar: Sydney Hybrid. pedigree: Microcitrus australis x Microcitrus australisica. remarks: Not a very attractive tree--very small leaves and very thorny. Tree. Cultivar. Cutting.
- PI 539741 Microcitrus inodora (Bailey) Swingle RUTACEAE
 Microcitrus
 donor id: CRC 3784. origin: UNKNOWN. local name:
 Large-leaf Australian wild lime. remarks: Seed from
 Australia and New Guinea. See The Citrus Industry, Vol 1,
 p 356. Tree. Seed.

- PI 539742 Microcitrus inodora (Bailey) Swingle RUTACEAE
 Microcitrus
 donor id: CRC 3785. origin: UNKNOWN. local name:
 Large-leaf Australian wild lime. remarks: Seed from New
 Guinea. See The Citrus Industry, Vol 1, p 356. Small
 tree, considerable pale, chlorotic growth; not seem well
 adapted to Riverside. Tree. Seed.
- PI 539743 Microcitrus warburgiana (Bailey) T. Tanaka RUTACEAE
 Microcitrus
 donor id: CRC 3782. origin: UNKNOWN. local name: New
 Guinea wild lime. remarks: Seed from Australia and New
 Guinea. See The Citrus Industry, Vol 1, pp 357-8. Some
 dieback, especially on north, possibly due to wind.
 Tree. Seed.
- PI 539744 Micromelum minutum (Forster f.) Seemann RUTACEAE Citrus relative donor id: CRC 3902. origin: UNKNOWN. local name: Micromelum. remarks: See The Citrus Industry, Vol 1, p 203. Tropical species too tender for field in Riverside, California. Tree. Seed.
- PI 539745 Murraya koenigii (L.) Sprengel RUTACEAE Citrus relative donor id: CRC 3165. origin: UNKNOWN. local name: Curry leaf. remarks: Field trees died; kept in greenhouse and lathhouse only at Riverside. Tree. Seed.
- PI 539746 Murraya paniculata (L.) Jack RUTACEAE Citrus relative donor id: CRC 1637. origin: UNKNOWN. local name: Orange Jessamine. remarks: Attractive, compact shrub or small tree. Small green fruits present 12-87. Tree. Plant.
- PI 539747 Murraya paniculata var. ovatifoliolata Engl. RUTACEAE Citrus relative donor id: CRC 3171. origin: UNKNOWN. local name: Hawaiian Mock orange. remarks: Similar to Florida mock orange. Tree. Seed.
- PI 539748 Naringi crenulata (Roxb.) Nicolson RUTACEAE Citrus relative donor id: CRC 2879. origin: UNKNOWN. local name: Hesperethusa. remarks: Attractive tree, no fruit 1987 (planted 1984). Tree. Cutting.
- PI 539749 Pamburus missionis (Wallich ex Wight) Swingle RUTACEAE Citrus relative donor id: CRC 3511. origin: UNKNOWN. pedigree: Open pollinated seedling. local name: Pamburus. remarks: Monoembryonic. Too tender for field in Riverside; kept in greenhouse only. See The Citrus Industry, Vol 1, pp 263-4. Tree. Seed.

- PI 539750 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 1498. origin: UNKNOWN. cultivar: USDA. local name: USDA large flower trifoliate. Tree. Cultivar. Cutting.
- PI 539751 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 1717. origin: UNKNOWN. cultivar: Pomeroy. local name: Pomeroy trifoliate. Tree. Cultivar.
- PI 539752 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 2252. origin: UNKNOWN. cultivar: Webber-Fawcett #22. Tree. Cultivar. Seed.
- PI 539753 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 2254. origin: UNKNOWN. cultivar: Barnes. Tree. Cultivar. Seed.
- PI 539754 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 2748. origin: UNKNOWN. cultivar: Morton. Tree. Cultivar. Cutting.
- PI 539755 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 2861. origin: UNKNOWN. cultivar: Texas. pedigree: Open pollinated seedling. local name: Texas, small flower. Tree. Cultivar. Seed.
- PI 539756 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 2862. origin: UNKNOWN. cultivar: Florida. pedigree: Open pollinated seedling. remarks: Large-flowered trifoliate. Tree. Cultivar. Seed.
- PI 539757 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3206. origin: UNKNOWN. cultivar: Argentina. local name: Argentine trifoliate. Tree. Cultivar. Cutting.
- PI 539758 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3207. origin: UNKNOWN. cultivar: Towne "G". Tree. Cultivar. Cutting.
- PI 539759 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3209. origin: UNKNOWN. cultivar: Rich 12-2. Tree. Cultivar. Cutting.
- PI 539760 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3210. origin: UNKNOWN. cultivar: Kryder 16-6. remarks: From Kryder grove, Claremont, California. Tree. Cultivar. Cutting.

- PI 539761 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3211. origin: UNKNOWN. cultivar: Rich 22-2. local name: Rich 22-2 small flower trifoliate. Tree. Cultivar. Cutting.
- PI 539762 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate
 donor id: CRC 3212. origin: UNKNOWN. cultivar: Kryder
 Medium. remarks: From Kryder grove, Claremont,
 California. Tree. Cultivar. Cutting.
- PI 539763 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3213. origin: UNKNOWN. cultivar: Kryder 60-2. local name: Kryder 60-2 trifoliate. remarks: From Kryder grove, Claremont, California. Tree. Cultivar. Cutting.
- PI 539764 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate
 donor id: CRC 3215. origin: UNKNOWN. cultivar: Kryder
 55-5. local name: Kryder 55-5 trifoliate. remarks: From
 Kryder grove, Claremont, California. Tree. Cultivar.
 Cutting.
- PI 539765 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate
 donor id: CRC 3217. origin: UNKNOWN. cultivar: Kryder
 15-3. local name: Kryder 15-3 trifoliate. remarks: From
 Kryder grove, Claremont, California. Tree. Cultivar.
 Cutting.
- PI 539766 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate
 donor id: CRC 3218. origin: UNKNOWN. cultivar: Kryder
 8-5. local name: Kryder 8-5 trifoliate. Tree.
 Cultivar. Cutting.
- PI 539767 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate
 donor id: CRC 3219. origin: UNKNOWN. cultivar: Kryder
 28-3. local name: Kryder 28-3 trifoliate. remarks: From
 Kryder grove, Claremont, California. Tree. Cultivar.
 Cutting.
- PI 539768 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3330-A. origin: UNKNOWN. cultivar: Flying Dragon. pedigree: Open pollinated seedling. remarks: Poncirus trifoliata var. monstrosa. See The Citrus Industry, Vol 1, p 586. Tree. Cultivar. Seed.
- PI 539769 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3330-B. origin: UNKNOWN. cultivar: Flying Dragon. pedigree: Open pollinated seedling. remarks: Growth habit is of typical trifoliate orange. Tree. Cultivar. Seed.

- PI 539770 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3338. origin: UNKNOWN. cultivar: Benecke. pedigree: Open pollinated seedling. local name: Benecke trifoliate. Tree. Cultivar. Seed.
- PI 539771 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3345. origin: UNKNOWN. cultivar: Christiansen. pedigree: Open pollinated seedling. local name: Christiansen small flower trifoliat. Tree. Cultivar. Seed.
- PI 539772 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3351. origin: UNKNOWN. cultivar: Fairhope. pedigree: Open pollinated seedling. remarks: Originally from Fairhope, Alabama. Tree. Cultivar. Cutting.
- PI 539773 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3411. origin: UNKNOWN. cultivar:
 Jacobson. pedigree: Open pollinated seedling. local name: Jacobsen trifoliate. Tree. Cultivar. Seed.
- PI 539774 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3412. origin: UNKNOWN. cultivar: Yamaguchi. pedigree: Open pollinated seedling. local name: Yamaguchi trifoliate. Tree. Cultivar. Seed.
- PI 539775 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3484. origin: UNKNOWN. cultivar: Frost. remarks: Exceptionally vigorous. Tree. Cultivar. Cutting.
- PI 539776 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3485. origin: UNKNOWN. cultivar: Rich 16-6. Tree. Cultivar. Cutting.
- PI 539777 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3486. origin: UNKNOWN. cultivar: Kryder 55-1. local name: Kryder 55-1 large flower. remarks: Exocortis removed by shoot tip grafting 1986. Tree. Cultivar. Cutting.
- PI 539778 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3547. origin: UNKNOWN. cultivar: Benoit. local name: Benoit trifoliate. Tree. Cultivar. Cutting.
- PI 539779 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3548. origin: UNKNOWN. cultivar: English. local name: English large orange small flower. Tree. Cultivar. Cutting.

- PI 539780 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3549. origin: UNKNOWN. cultivar: Simmons. local name: Simmons trifoliate. Tree. Cultivar. Cutting.
- PI 539781 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3570. origin: UNKNOWN. cultivar: Ronsse. local name: Ronsse small flower trifoliate. Tree. Cultivar. Cutting.
- PI 539782 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3571. origin: UNKNOWN. cultivar: Taylor. local name: Taylor small flower trifoliate. remarks: Exocortis removed by shoot tip grafting 1986. Tree. Cultivar. Cutting.
- PI 539783 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3572. origin: UNKNOWN. cultivar: Towne "F". local name: Towne F large flower trifoliate. remarks: Exocortis removed by shoot tip grafting 1986. Tree. Cultivar. Cutting.
- PI 539784 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3586. origin: UNKNOWN. cultivar: Kryder 5-5. local name: Kryder 5-5 large flower trifoliate. Tree. Cultivar. Cutting.
- PI 539785 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3587. origin: UNKNOWN. cultivar: Rich 7-5. local name: Rich 7-5 large flower trifoliate. Tree. Cultivar. Cutting.
- PI 539786 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3588. origin: UNKNOWN. cultivar: Marks. local name: Marks trifoliate. Tree. Cultivar. Cutting.
- PI 539787 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3795. origin: UNKNOWN. cultivar: Hiryu. local name: Flying Dragon. Tree. Cultivar. Seed.
- PI 539788 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3876. origin: UNKNOWN. cultivar: English Dwarf. pedigree: Open pollinated seedling. local name: English Dwarf trifoliate. Tree. Cultivar. Seed.
- PI 539789 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3938. origin: UNKNOWN. cultivar: #27. local name: #27 trifoliate. Tree. Cultivar. Seed.
- PI 539790 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 3939. origin: UNKNOWN. cultivar: #26. local name: Nanjing trifoliate. Tree. Cultivar. Seed.

- PI 539791 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate donor id: CRC 838. origin: UNKNOWN. cultivar: Rubidoux. local name: Rubidoux trifoliate. remarks: Parent tree subject to brown rot gummosis; seedlings of parent are resistant. Tree. Cultivar. Seed.
- PI 539792 Ruta graveolens L. RUTACEAE Citrus relative donor id: CRC 3508. origin: UNKNOWN. local name: Ruta. remarks: Too tender for field in Riverside; kept in lathhouse or greenhouse only. Common name: herb of grace. Tree. Seed.
- PI 539793 Severinia buxifolia (Poiret) Ten. RUTACEAE Citrus relative donor id: CRC 1491. origin: UNKNOWN. local name: Chinese box orange. remarks: From Indo-China. Large-leafed--most vigorous Severinia on station. Tree. Cutting.
- PI 539794 Severinia buxifolia (Poiret) Ten. RUTACEAE Citrus relative donor id: CRC 1492. origin: UNKNOWN. local name: Chinese box orange. Tree. Cutting.
- PI 539795 Severinia buxifolia (Poiret) Ten. RUTACEAE Citrus relative donor id: CRC 1494. origin: UNKNOWN. local name: Chinese box orange. Tree. Cutting.
- PI 539796 Severinia buxifolia (Poiret) Ten. RUTACEAE Citrus relative donor id: CRC 1495. origin: UNKNOWN. local name: Chinese box orange. Tree. Cutting.
- PI 539797 Severinia buxifolia (Poiret) Ten. RUTACEAE Citrus relative donor id: CRC 1497. origin: UNKNOWN. cultivar: Brachytic. pedigree: Open pollinated seedling. local name: dense-leaved box orange. Tree. Cultivar. Cutting.
- PI 539798 Severinia buxifolia (Poiret) Ten. RUTACEAE Citrus relative donor id: CRC 3724. origin: UNKNOWN. local name: Chinese boxwood. Tree. Seed.
- PI 539799 Severinia buxifolia (Poiret) Ten. RUTACEAE Citrus relative donor id: CRC 3726. origin: UNKNOWN. local name: Chinese boxwood. Tree. Seed.

- PI 539800 Triphasia trifolia (Burm. f.) P. Wilson RUTACEAE Citrus relative donor id: CRC 3507. origin: UNKNOWN. local name: Trifoliate limeberry, Limeberry. remarks: Too tender for the field in Riverside; kept in greenhouse only. Described in The Citrus Industry, Vol 1, p 260. Tree. Seed.
- PI 539801 X Citremocitrus sp. RUTACEAE Citrus relative donor id: CRC 2439. origin: UNKNOWN. cultivar: Eremolemon. pedigree: Eremocitrus glauca x Citrus meyeri?. local name: Eremolemon. remarks: From tree which probably hybridized with Meyer lemon. Tree. Cultivar. Plant.
- PI 539802 X Citrofortunella sp. RUTACEAE Kumquat hybrid donor id: CRC 3069. origin: UNKNOWN. cultivar: Warren Limequat. pedigree: C. aurantiifolia 'West Indian' x Fortunella japonica. remarks: Fruit seems identical to Eustis. Tree. Cultivar. Cutting.
- PI 539803 X Citrofortunella sp. RUTACEAE Kumquat hybrid donor id: CRC 3073. origin: UNKNOWN. cultivar: Phillippine Calamandarin. pedigree: Citrus reticulata x Fortunella sp. (unknown cultivars). local name: Philippine calamandarin. remarks: Attractive tree with lots of small, orange fruit, too sour to eat 4/87. Tree. Cultivar. Seed.
- PI 539804 X Citrofortunella sp. RUTACEAE Kumquat hybrid donor id: CRC 3172. origin: UNKNOWN. cultivar: Tavares Limequat. pedigree: Citrus aurantiifolia 'West Indian' x Fortunella margarita. local name: Tavares limequat. remarks: Seedling yellows removed by thermotherapy 1986. Looks more like lemonquat or small lemon or lemon hybrid. Fruit larger than Eustis and Lakeland, more spherical and somewhat flattened on end. Flower buds pink as described in The Citrus Industry (Vol 1, pp 579-580). Tree. Cultivar. Cutting.
- PI 539805 X Citrofortunella sp. RUTACEAE Kumquat hybrid donor id: CRC 3295. origin: UNKNOWN. cultivar:
 Procimequat. pedigree: (Citrus aurantiifolia 'Mexican' x Fortunella japonica) x Fortunella hindsii. Tree.
 Cultivar. Cutting.
- PI 539806 X Citrofortunella sp. RUTACEAE Kumquat hybrid donor id: CRC 3603. origin: UNKNOWN. cultivar: Eustis Limequat. pedigree: Citrus aurantiifolia 'West Indian' x Fortunella japonica Open pollinated seedling. local name: Eustis limequat. remarks: See The Citrus Industry, Vol 1, pp 579-580. Tree. Cultivar. Cutting.

- PI 539807 X Citrofortunella sp. RUTACEAE Kumquat hybrid donor id: CRC 3604. origin: UNKNOWN. cultivar: Lakeland Limequat. pedigree: Citrus aurantiifolia 'West Indian' x Fortunella japonica Open pollinated seedling. local name: Lakeland limequat. remarks: See The Citrus Industry, Vol 1, pp 579-580. Fruit not larger than Eustis, but trees poor, and this might account for small fruit. Tree. Cultivar. Cutting.
- PI 539808 X Citromicrocitrus sp. RUTACEAE Microcitrus hybrid donor id: CRC 2891. origin: UNKNOWN. cultivar:
 Faustrime. pedigree: Microcitrus sp. x C. aurantiifolia (unknown cultivars). remarks: Fl hybrid of Microcitrus australasica x lime. Ratty tree, much dieback. Tree. Cultivar. Cutting.
- PI 539809 X Citroncirus sp. RUTACEAE Citrange
 donor id: CRC 1441. origin: UNKNOWN. cultivar: Rusk.
 pedigree: Citrus sinensis 'Ruby' x Poncirus trifoliata.
 Tree. Cultivar. Cutting.
- PI 539810 X Citroncirus sp. RUTACEAE Citrange donor id: CRC 1459. origin: UNKNOWN. cultivar: Troyer. pedigree: Citrus sinensis 'Washington' x Poncirus trifoliata Open pollinated seedling. Tree. Cultivar. Cutting.
- PI 539811 X Citroncirus sp. RUTACEAE Citrange donor id: CRC 1463. origin: UNKNOWN. cultivar: Morton. pedigree: Poncirus trifoliata x C. sinensis (unknown cultivars). local name: Morton. Tree. Cultivar. Cutting.
- PI 539812 X Citroncirus sp. RUTACEAE Citrange donor id: CRC 271. origin: UNKNOWN. cultivar: Cunningham. pedigree: P. trifoliata x C. sinensis (unknown cultivars). Tree. Cultivar. Cutting.
- PI 539813 X Citroncirus sp. RUTACEAE Citrange donor id: CRC 275. origin: UNKNOWN. cultivar: Savage. pedigree: P. trifoliata x C. sinensis (unknown cultivars). Tree. Cultivar. Cutting.
- PI 539814 X Citroncirus sp. RUTACEAE Citrange donor id: CRC 276. origin: UNKNOWN. cultivar: Sanford. pedigree: P. trifoliata x C. sinensis (unknown cultivars). remarks: Exocortis removed by shoot tip grafting (STG 164-4) 1985. Tree. Cultivar. Cutting.

- PI 539815 X Citroncirus sp. RUTACEAE Citrange
 donor id: CRC 2866. origin: UNKNOWN. cultivar: Citrange
 #1416. pedigree: P. trifoliata x C. sinensis (unknown
 cultivars) Open pollinated seedling. Tree. Cultivar.
 Seed.
- PI 539816 X Citroncirus sp. RUTACEAE Citrange
 donor id: CRC 3205. origin: UNKNOWN. cultivar: Yuma.
 pedigree: P. trifoliata x C. sinensis (unknown
 cultivars). local name: Yuma citrange. remarks:
 Performance as rootstock like Sacaton citrumelo; shows
 iron deficiency. Tree. Cultivar. Cutting.
- PI 539817 X Citroncirus sp. RUTACEAE Citrange
 donor id: CRC 3336. origin: UNKNOWN. pedigree: C.
 sinensis 'Spanish' x Poncirus trifoliata (unknown
 cultvr). Tree. Cutting.
- PI 539818 X Citroncirus sp. RUTACEAE Citrange
 donor id: CRC 3881. origin: UNKNOWN. pedigree: Poncirus
 trifoliata + C. unshiu graft hyb(unknown cultivars).
 remarks: Thermotherapy during processing as import.
 Tree. Cutting.
- PI 539819 X Citroncirus sp. RUTACEAE Citrange donor id: CRC 3908. origin: UNKNOWN. cultivar: Benton. pedigree: Poncirus trifoliata x C. sinensis (unknown cultivars). local name: Benton citrange. Tree. Cultivar. Cutting.
- PI 539820 X Citroncirus sp. RUTACEAE Citrange donor id: CRC 3911. origin: UNKNOWN. cultivar: C-32. pedigree: Poncirus trifoliata (unknown cultivar) x C. sinensis 'Ruby'. local name: C-32 citrange. remarks: See Hortscience 21(1): 157-158. Tree. Cultivar. Cutting.
- PI 539821 X Citroncirus sp. RUTACEAE Citrange donor id: CRC 3912. origin: UNKNOWN. cultivar: C-35. pedigree: Poncirus trifoliata (unknown cultivar) x C. sinensis 'Ruby'. local name: C-35 citrange. remarks: See Hortscience 21(1): 157-158. Tree. Cultivar. Cutting.
- PI 539822 X Citroncirus sp. RUTACEAE Citrumelo
 donor id: CRC 1452. origin: UNKNOWN. cultivar:
 Citrumelo. pedigree: P. trifoliata x C. paradisi
 (unknown cultivars) Open pollinated seedling. Tree.
 Cultivar. Cutting.

- PI 539823 X Citroncirus sp. RUTACEAE Citrumelo
 donor id: CRC 3337. origin: UNKNOWN. cultivar: Sacaton.
 pedigree: Poncirus trifoliata x €itrus paradisi (unknown
 cultivars). local name: Sacaton citrumelo. remarks: See
 The Citrus Industry, Vol 1, p 347. Tree. Cultivar.
 Cutting.
- PI 539824 X Citroncirus sp. RUTACEAE Citrumelo
 donor id: CRC 3341. origin: UNKNOWN. cultivar: CPB
 4475. pedigree: Poncirus trifoliata x C. paradisi
 (unknown cultivars). local name: Swingle. Tree.
 Cultivar. Cutting.
- PI 539825 X Citroncirus sp. RUTACEAE Citrumelo
 donor id: CRC 3348. origin: UNKNOWN. cultivar:
 Citrumelo. pedigree: P. trifoliata x C. paradisi
 (unknown cultivars). remarks: Exocortis removed by shoot
 tip grafting 1986. Tree. Cultivar. Cutting.
- PI 539826 X Citroncirus sp. RUTACEAE Citrumelo donor id: CRC 3414. origin: UNKNOWN. cultivar: Sacaton. pedigree: Poncirus trifoliata x Citrus paradisi (unknown cultivars) Open pollinated seedling. local name: Sacaton citrumelo. Tree. Cultivar. Seed.
- PI 539827 X Citroncirus sp. RUTACEAE Citrumelo
 donor id: CRC 3417. origin: UNKNOWN. cultivar: Sacaton.
 pedigree: Poncirus trifoliata x Citrus paradisi (unknown
 cultivars) Open pollinated seedling. local name: Sacaton
 citrumelo. remarks: Fruit small, yellow, smooth, seedy.
 Tree shows great amount of die-back. Tree. Cultivar.
 Seed.
- PI 539828 X Citroncirus sp. RUTACEAE Citrumelo donor id: CRC 3771. origin: UNKNOWN. cultivar: Swingle. pedigree: P. trifoliata x C. paradisi (unknown cultivars). local name: Swingle citrumelo. remarks: Origin: USDA Leesburg, Florida, 1974. Tree. Cultivar. Cutting.
- PI 539829 X Citroncirus sp. RUTACEAE Citrumelo donor id: CRC 3889. origin: UNKNOWN. pedigree: Citrus paradisi 'Hall' x Poncirus trifoliata 'Rubidoux'. Tree. Seed.
- PI 539830 X Citroncirus sp. RUTACEAE Citrumelo donor id: CRC 3969. origin: UNKNOWN. pedigree: C. maxima 'African' x Poncirus trifoliata 'Rubidoux'. Tree. Cutting.

- PI 539831 X Citroncirus sp. RUTACEAE Lime hybrid donor id: CRC 3997. origin: UNKNOWN. pedigree: C. limonia x X Citroncirus sp. 'Troyer'. Tree. Cutting.
- PI 539832 X Citroncirus sp. RUTACEAE Sweet orange hybrid donor id: CRC 3998. origin: UNKNOWN. cultivar: US 119. pedigree: (C. paradisi 'Duncan' x P. trifol.) x C. sinensis 'Succory'. local name: USDA 88-5. Tree. Cultivar. Cutting.
- PI 539833 X Citroncirus sp. RUTACEAE Trifoliate hybrid donor id: CRC 1436. origin: UNKNOWN. cultivar: Citradia. pedigree: P. trifoliata x C. aurantium (unknown cultivars). Tree. Cultivar. Cutting.
- PI 539834 X Citroncirus sp. RUTACEAE Trifoliate hybrid donor id: CRC 1437. origin: UNKNOWN. cultivar: Citradia. pedigree: P. trifoliata x C. aurantium (unknown cultivars). Tree. Cultivar. Cutting.
- PI 539835 X Citroncirus sp. RUTACEAE Trifoliate hybrid donor id: CRC 1438. origin: UNKNOWN. cultivar: Citradia. pedigree: P. trifoliata x C. aurantium (unknown cultivars). Tree. Cultivar. Cutting.
- PI 539836 X Citroncirus sp. RUTACEAE Trifoliate hybrid donor id: CRC 1447. origin: UNKNOWN. cultivar: Citrangor. pedigree: (P. trifoliata x C. sinensis) x C. sinensis (unknown cultvr) Open pollinated seedling. Tree. Cultivar. Cutting.
- PI 539837 X Citroncirus sp. RUTACEAE Trifoliate hybrid donor id: CRC 1448. origin: UNKNOWN. cultivar: Citremon. pedigree: P. trifoliata x C. limon (unknown cultivars). Tree. Cultivar. Cutting.
- PI 539838 X Citroncirus sp. RUTACEAE Trifoliate hybrid donor id: CRC 1449. origin: UNKNOWN. cultivar: Citremon. pedigree: P. trifoliata x C. limon (unknown cultivars). local name: 1449 Citremon. Tree. Cultivar. Cutting.
- PI 539839 X Citroncirus sp. RUTACEAE Trifoliate hybrid donor id: CRC 2618. origin: UNKNOWN. cultivar: Citrandarin. pedigree: P. trifoliata x C. reticulata (unknown cultivars). Tree. Cultivar. Cutting.

- PI 539840 X Citroncirus sp. RUTACEAE Trifoliate hybrid donor id: CRC 2619. origin: UNKNOWN. cultivar: Citraldin. pedigree: P. trifoliata (unknown cultivar) x C. madurensis. remarks: Trifoliate foliage; small orange-yellow, inedible fruit; very small seeds; weak-growing tree. Tree. Cultivar. Cutting.
- PI 539841 X Citroncirus sp. RUTACEAE Trifoliate hybrid donor id: CRC 3415. origin: UNKNOWN. cultivar: S-302 Citranguma. pedigree: P. trifoliata x Citrus sp. (unknown cultivars) Open pollinated seedling. local name: Citranguma. Tree. Cultivar. Seed.
- PI 539842 X Citroncirus sp. RUTACEAE Trifoliate hybrid donor id: CRC 3552. origin: UNKNOWN. cultivar: S-281. pedigree: [Poncirus trifoliata x (C. paradisi x C. reticulata)] (unknown cultivars). local name: citrangelo. remarks: CPB No. 48082. From Winterhaven, Texas. Tree. Cultivar. Seed.
- PI 539843 X Citroncirus sp. RUTACEAE Trifoliate hybrid donor id: CRC 3573. origin: UNKNOWN. cultivar: Glen Citrangedin. pedigree: X Citroncirus sp. (unknown cultivar) x C. madurensis Open pollinated seedling. local name: Altamaha. Tree. Cultivar. Cutting.
- PI 539844 X Citroncirus sp. RUTACEAE Trifoliate hybrid donor id: CRC 3767. origin: UNKNOWN. cultivar: Swingle. pedigree: P. trifoliata x C. paradisi (unknown cultivars). local name: Swingle citrumelo. remarks: Budwood from USDA Foundation Farm, Leesburg, Florida, 1974. Tree. Cultivar. Cutting.
- PI 539845 X Citroncirus sp. RUTACEAE Trifoliate hybrid donor id: CRC 3821. origin: UNKNOWN. pedigree: Citrus paradisi 'Hall' x Poncirus trifoliata 'Rubidoux'. local name: citrumelo. Tree. Seed.
- PI 539846 X Citroncirus sp. RUTACEAE Trifoliate hybrid donor id: CRC 3954. origin: UNKNOWN. cultivar: Trifeola. pedigree: Citrus x tangelo 'Minneola' x Poncirus trifoliata. local name: Trifeola, MXT. Tree. Cultivar. Cutting.

- PI 539847 X Citroncirus sp. RUTACEAE Trifoliate hybrid donor id: CRC 3957. origin: UNKNOWN. cultivar: X639. pedigree: C. reshni 'Cleopatra' x Poncirus trifoliata. remarks: Becoming more popular in South Africa where salinity is problem. Reported to be similar to Troyer citrange but slightly slower growth; less vigorous growth in nursery than citranges; comparable to Swingle citrumelo; slightly susceptible to Phytophthora citrophthora. Tree. Cultivar. Cutting.
- PI 539848 X Coleara sp. RUTACEAE Citrus relative hybrid donor id: CRC 3917. origin: UNKNOWN. pedigree: Clymenia polyandra x [(Citrus aurantiifolia 'Mexican' x Fortunella japonica) x Fortunella hindsii]. Tree. Seed.
- PI 539849 X Fortucitrocirus sp. RUTACEAE Kumquat hybrid donor id: CRC 1440. origin: UNKNOWN. cultivar:
 Thomasville Citrangequat. pedigree: Fortunella sp. x (Poncirus trifoliata x Citrus sinensis) (unknown cultivars). remarks: Willits citrange x F. margarita.
 Tree. Cultivar. Cutting.
- PI 539850 X Fortucitrocirus sp. RUTACEAE Kumquat hybrid donor id: CRC 2864. origin: UNKNOWN. cultivar:

 Thomasville Citrangequat. pedigree: Fortunella sp. x
 (Poncirus trifoliata x Citrus sinensis). remarks:
 Seedling yellows removed by thermotherapy 1986. Appears identical to CRC 1440. Tree. Cultivar. Seed.
- PI 539851 X Fortucitrocirus sp. RUTACEAE Kumquat hybrid donor id: CRC 3259. origin: UNKNOWN. cultivar: Citrangequat 19-15-7. pedigree: Fortunella sp. x (Poncirus trifoliata x Citrus sp.). Tree. Cultivar. Cutting.
- PI 539852 X Fortucitrocirus sp. RUTACEAE Kumquat hybrid donor id: CRC 3483. origin: UNKNOWN. cultivar: Sinton Citrangequat. pedigree: Fortunella obovata x X Citroncirus sp. 'Rusk'. remarks: See The Citrus Industry, Vol 1, p 584. Appears identical to CRC 3642. Tree. Cultivar. Seed.
- PI 539853 X Fortucitrocirus sp. RUTACEAE Kumquat hybrid donor id: CRC 3642. origin: UNKNOWN. cultivar: Sinton Citrangequat. pedigree: Fortunella margarita 'Nagami'x X Citroncirus 'Rusk' Open pollinated seedling. remarks: See The Citrus Industry, Vol 1, p 584. Tree. Cultivar. Cutting.

PI 539854 X Microcirus sp. RUTACEAE Trifoliate hybrid donor id: CRC 3566. origin: UNKNOWN. pedigree:
Microcitrus virgata x Poncirus trifoliata. Tree.
Cutting.

PI 539855 X Microcitronella sp. RUTACEAE Microcitrus hybrid donor id: CRC 1466. origin: UNKNOWN. cultivar: Faustrimedin. pedigree: Microcitrus x (Fortunella x C. reticul.) unknown cultivars. remarks: Ratty tree, much dieback. Fruit on ground; about size and shape of fat, stubby finger lime. Rind medium orange, about as smooth as navel orange, very thin. Few seeds; green flesh, juicy, very sour. Tree. Cultivar. Cutting.

PI 539856. Poa pratensis L. POACEAE Kentucky bluegrass

Donated by: Brede, A.D., Jacklin Seed Company, West 5300 Riverbend Avenue, Post Falls, Idaho, United States. remarks: Freedom Kentucky Bluegrass. Received March 29, 1990.

origin: United States. origin institute: Jacklin Seed Company, West 5300 Riverbend Ave., Post Falls, Idaho 83854-9499. cultivar: FREEDOM. pedigree: Single selection from NJE P-59 (female parent)/'Glade' Kentucky bluegrass. other id: PVP 8800074. source: Certificate in force. group: PVPO. other id: CV-41. source: Crop Sci. 30(6):1356 1990. group: CSR-BLUEGRASS. remarks: Facultative apomict with approximately 95% of its progeny appearing genetically identical to the maternal parent. Moderately low growing, turf-type, attractive, medium-green color. Exceptional color retention in cool weather and attractive early spring color. Moderately aggressive, medium-fine texture, and moderately high density. Excellent resistance to stem rust, leaf spot and melting out disease,. Cultivar. Seed.

PI 539857. Cynodon dactylon (L.) Pers. POACEAE Bermudagrass

Donated by: Hanna, W.W., Agricultural Research Service -- USDA, Coastal Plain Experiment Station, Tifton, Georgia, United States. remarks: Tifton 10 Turf Bermudagrass. Received March 29, 1990.

PI 539857-continued

origin: United States. origin institute: Georgia Coastal Plain Exp. Sta., Tifton, Georgia 31793. cultivar: TIFTON 10. other id: CV-19. source: Crop Sci. 30(6):1355 1990. group: CSR-BERMUDAGRASS. remarks: Vegetatively propagated hexaploid with 2n = 54 chromosomes. Sheds pollen but sets sparse seed. Foliage cross-textured with natural dark bluish-green color. Greens up early in spring and appears winterhardy. Tolerance to ring nematodes (Criconemella ornata). Less thatch than other commercial cultivars. Suited for golf course roughs, roadsides, low traffic athletic fields, commercial. Cultivar. Plant.

PI 539858. Buchloe dactyloides (Nutt.) Engelm. POACEAE Buffalograss

Donated by: Engelke, M.C., Texas Agr. Exp. Sta., Texas A&M University System, 17360 Coit Rd., Dallas, Texas, United States; and Texas A&M University System. remarks: Prairie Buffalograss. Received March 29, 1990.

origin: United States. origin institute: Texas A&M University System, 17360 Coit Rd., Dallas, Texas 75252-6599. cultivar: PRAIRIE. pedigree: Selection from open pollinated progeny of TAES1363. other id: CV-134. source: Crop Sci. 30(6):1360 1990. group: CSR-OTHER GRASSES. remarks: Vegetatively produced turf type. Produces female inflorescences prolifically but no viable seed in absence of compatible pollen source. Male inflorescences are absent. Blue/green, dense, fine-textured, stoloniferous with mature plant height 10-15cm. Color and mature plant height dependent on level of management. Spreads faster and more dense and uniform in visual appearance than other. Cultivar. Plant.

PI 539859. Zea mays L. subsp. mays POACEAE Corn

Donated by: Scott, G.E., Agricultural Research Service -- USDA, Mississippi Agr. and Forestry Exp. Sta., Agronomy Dept., P.O. Box 5248, Mississippi State, Mississippi, United States. remarks: Mp313E (Does Not Want A Certificate). Received April 06, 1990.

PI 539859-continued

origin: United States. origin institute: Agricultural Research Service -- USDA, Mississippi Agr. and Forestry Exp. Sta., Mississippi State Univ., P.O. Box 5248, Mississippi State, Mississippi 39762. cultivar: MP313E. pedigree: Direst self from Tuxpan. other id: PL-150. source: Crop Sci. 30(6):1378 1990. group: CSR-MAIZE. remarks: Plants tall with high ear placement on stalk. Maturity late, AES 1200 or later. Kernels and cobs white. Husks long, tight husks which contribute to resistance to corn earworm (Heliothis zea). Good general combining ability for yield. Resistant to kernel infection by Aspergillus flavus fungus, maize chlorotic dwarf virus, and low to intermediate to maize dwarf mosaic virus. Resistance to race O of Bipolaris. Spring Annual. Breeding Material. Seed.

PI 539860. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Fehr, W.R., Iowa Agric. and Home Econ. Exp. Sta., Iowa State University, 1212 Agronomy, Ames, Iowa, United States; and Puerto Rico Agr. Exp. Sta.. remarks: SS201 Soybean. Received April 16, 1990.

origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Sta., Iowa State University, 1212
Agronomy, Ames, Iowa 50011. cultivar: SS201. pedigree: BC2F2 plant selected from cross (S1346)3 x PI 81762.
other id: CV-255. group: CSR-SOYBEAN. remarks: Maturity group II. Flowers purple, gray pubescence. Pods tan at maturity. Seeds dull yellow with yellow hila. Seed yield 3078 kg/ha. Seed weight 90mg. Seed protein 400g/kg. Seed oil 217g/kg. Spring Annual. Cultivar. Seed.

PI 539861. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Fehr, W.R., Iowa Agric. and Home Econ. Exp. Sta., Iowa State University, 1212 Agronomy, Ames, Iowa, United States; and Puerto Rico Agr. Exp. Sta.. remarks: SS202 Soybean. Received April 16, 1990.

origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Sta., Iowa State University, 1212 Agronomy, Ames, Iowa 50011. cultivar: SS202. pedigree: BC2F2 plant selected from cross (HP 20-20)3 x PI 135624. other id: CV-256. source: Crop Sci. 30(6):1361 1990. group: CSR-SOYBEAN. remarks: Maturity group II. Flowers purple, gray pubescence. Pods tan at maturity. Seeds dull yellow with yellow hila. Seed yield 2836 kg/ha. Seed weight 100mg. Seed protein 428g/kg. Seed oil 210g/kg. Spring Annual. Cultivar. Seed.

PI 539862. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Fehr, W.R., Iowa Agric. and Home Econ. Exp. Sta., Iowa State University, 1212 Agronomy, Ames, Iowa, United States; and Puerto Rico Agr. Exp. Sta.. remarks: HP201 Soybean. Received April 16, 1990.

origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Sta., Iowa State University, 1212
Agronomy, Ames, Iowa 50011. cultivar: HP201. pedigree: F4 plant selected from cross Vinton 81 x Hardin. other id: CV-257. source: Crop Sci. 30(6):1361 1990. group: CSR-SOYBEAN. remarks: Maturity group I. Flowers purple, gray pubescence. Pods brown at maturity. Seeds dull yellow with yellow hila. Seed yield 2896 kg/ha. Plant height 107cm. Lodging resistance good. Seed weight 200mg. Seed protein 410g/kg. Seed oil 210g/kg. Spring Annual. Cultivar. Seed.

PI 539863. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Fehr, W.R., Iowa Agric. and Home Econ. Exp. Sta., Iowa State University, 1212 Agronomy, Ames, Iowa, United States; and Puerto Rico Agr. Exp. Sta.. remarks: HP202 Soybean. Received April 16, 1990.

origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Sta., Iowa State University, 1212
Agronomy, Ames, Iowa 50011. cultivar: HP202. pedigree: BC1F3 plant selected from cross (Vinton 81 x B216) x
Vinton 81. other id: CV-258. source: Crop Sci.
30(6):1362 1990. group: CSR-SOYBEAN. remarks: Maturity group I. Flowers purple, gray pubescence. Pods tan at maturity. Seeds dull yellow with yellow hila. Seed yield 2849 kg/ha. Plant height 109cm. Lodging resistance good. Seed weight 200mg. Seed protein 420g/kg. Seed oil 210g/kg. Spring Annual. Cultivar. Seed.

PI 539864. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Fehr, W.R., Iowa Agric. and Home Econ. Exp. Sta., Iowa State University, 1212 Agronomy, Ames, Iowa, United States; and Puerto Rico Agr. Exp. Sta.. remarks: HP203 Soybean. Received April 16, 1990.

PI 539864-continued

origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Sta., Iowa State University, 1212
Agronomy, Ames, Iowa 50011. cultivar: HP203. pedigree: BC1F3 plant selected from cross (Vinton 81 x B216) x
Vinton 81. other id: CV-259. source: Crop Sci.
30(6):1362 1990. group: CSR-SOYBEAN. remarks: Maturity group I. Flowers white, gray pubescence. Pods tan at maturity. Seeds dull yellow with yellow hila. Seed yield 2688 kg/ha. Plant height 104cm. Lodging resistance good. Seed weight 210mg. Seed protein 420g/kg. Seed oil 210g/kg. Spring Annual. Cultivar. Seed.

PI 539865. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Fehr, W.R., Iowa Agric. and Home Econ. Exp. Sta., Iowa State University, 1212 Agronomy, Ames, Iowa, United States; and Puerto Rico Agr. Exp. Sta.. remarks: HP204 Soybean. Received April 16, 1990.

origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Sta., Iowa State University, 1212
Agronomy, Ames, Iowa 50011. cultivar: HP204. pedigree: BC1F3 plant selected from cross (Vinton 81 x Hardin) x Vinton 81. other id: CV-260. source: Crop Sci. 30(6):1363 1990. group: CSR-SOYBEAN. remarks: Maturity group I. Flowers purple, gray pubescence. Pods tan at maturity. Seeds dull yellow with yellow hila. Seed yield. 2708 kg/ha. Plant height 89cm. Lodging resistance good. Seed weight 220mg. Seed protein 420g/kg. Seed oil 210g/kg. Spring Annual. Cultivar. Seed.

PI 539866. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Fehr, W.R., Iowa Agric. and Home Econ. Exp. Sta., Iowa State University, 1212 Agronomy, Ames, Iowa, United States; and Puerto Rico Agr. Exp. Sta.. remarks: LS201 Soybean. Received April 16, 1990.

origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Sta., Iowa State University, 1212 Agronomy, Ames, Iowa 50011. cultivar: LS201. pedigree: F3 plant selected from cross (HS235 x A79-240011) x A79-240002. other id: CV-261. source: Crop Sci. 30(6):1363 1990. group: CSR-SOYBEAN. remarks: Maturity group II. Flowers purple, gray pubescence. Pods tan at maturity. Seeds dull yellow with yellow hila. Seed yield 3199 kg/ha. Plant height 89cm. Lodging resistance good. Seed quality good. Seed weight 272mg. Seed protein 407g/kg. Seed oil 214g/kg. Spring Annual. Cultivar. Seed.

PI 539867. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Fehr, W.R., Iowa Agric. and Home Econ. Exp. Sta., Iowa State University, 1212 Agronomy, Ames, Iowa, United States; and Puerto Rico Agr. Exp. Sta.. remarks: LS301 Soybean. Received April 16, 1990.

origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Sta., Iowa State University, 1212 Agronomy, Ames, Iowa 50011. cultivar: LS301. pedigree: F4 plant selected from cross A79-140022 x A79-140011. Both parents were large-seeded experimental lines developed at Iowa State University, whose parentages trace to Disoy, Prize, Provar, Magna, and Amsoy. other id: CV-262. source: Crop Sci. 30(6):1363 1990. CSR-SOYBEAN. other id: PVP 8800018. source: Certificate in force. group: PVPO. remarks: Maturity group III. Flowers purple, gray pubescence. Pods brown at maturity. Seeds dull yellow with yellow hila. Seed yield 3212 kg/ha. Plant height 84cm. Lodging resistance good. Seed quality good. Seed weight 254mg. Seed protein 404g/kg. Seed oil 222g/kg. Spring Annual. Cultivar. Seed.

PI 539868 to 539869. Zea mays L. subsp. mays POACEAE Corn

Donated by: Russell, W.A., Iowa Agric. and Home Econ. Exp. Station, Iowa State University, Ames, Iowa, United States. remarks: BS16(CB)C4 and BS17(CB)C4 Maize Germplasm (No Cert. Req.). Received April 11, 1990.

- PI 539868 origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Iowa State University, Ames, Iowa 50011. cultivar: BS16(CB)C4. pedigree: Mass selection in ETO composite. other id: GP-224. source: Crop Sci. 31(1):238 1991. group: CSR-MAIZE. remarks: Maturity AES 600. Plant vigor and seed yield good. Seed yellow dent type. Highly resistant to leaf-whorl feeding by European corn borer (Ostrinia nubilalis). Resistant to leaf sheath and collar feeding by second-generation European corn borer. Good disease resistance under Iowa conditions. Spring Annual. Breeding Material. Seed.
- PI 539869 origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Iowa State University, Ames, Iowa 50011. cultivar: BS17(CB)C4. pedigree: Recurrent selection from BS17. other id: GP-225. source: Crop Sci. 31(1):238 1991. group: CSR-MAIZE. remarks: Maturity AES 800. Plant vigor and seed yield good. Seed yellow dent type. Highly resistant to leaf-whorl feeding by European corn borer (Ostrinia nubilalis). Resistant to leaf sheath and collar feeding by second-generation European corn borer. Good disease resistance under Iowa conditions. Spring Annual. Breeding Material. Seed.

PI 539870. Zea mays L. subsp. mays POACEAE Corn

Donated by: Russell, W.A., Iowa Agric. and Home Econ. Exp. Station, Iowa State University, Ames, Iowa, United States. remarks: B92 Maize Germplasm Inbred Line (No Certificate Requested). Received April 11, 1990.

origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Iowa State University, Ames, Iowa 50011. cultivar: B92. pedigree: (B70 x H99) B70. other id: GP-226. source: Crop Sci. 31(1):237 1991. group: CSR-MAIZE. remarks: Maturity AES 700. Plant height medium, 150cm. Ear height 65cm. Combining ability similar to B70 in cross with B73. Seed large, smooth, yellow dent type. Highly resistant to leaf feeding by first-generation European corn borer (Ostrinia nubilalis). Good resistance to diseases under Iowa conditions. Good resistance to root and stalk lodging. Unstable plant phenotype for rate of growth and plant. Spring Annual. Genetic Material. Seed.

PI 539871 to 539872. Zea mays L. subsp. mays POACEAE Corn

Donated by: Russell, W.A., Iowa Agric. and Home Econ. Exp. Station, Iowa State University, Ames, Iowa, United States. remarks: B93 and B94 Maize Parental Lines (No Certificate Requested). Received April 11, 1990.

PI 539871 origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Iowa State University, Ames, Iowa 50011. cultivar: B93. pedigree: (B70 x H99) H99. other id: PL-151. source: Crop Sci. 31(1):247 1991. group: CSR-MAIZE. remarks: Maturity AES 500. Plant height short, 110cm. Ear height 35cm. Combining ability similar to H99. Seed large, smooth, dent type. Endosperm yellow. Highly resistant to leaf feeding by first-generation European corn borer (Ostrinia nubilalis). Good resistance to diseases under Iowa conditions. Good resistance to root and stalk lodging. Spring Annual. Breeding Material. Seed.

PI 539872 origin: United States. origin institute: Iowa Agric. and Home Econ. Exp. Station, Iowa State University, Ames, Iowa 50011. cultivar: B94. pedigree: BSSS(R)C8 (Iowa Stiff Stalk Synthetic). other id: PL-152. source: Crop Sci. 31(1):247 1991. group: CSR-MAIZE. remarks: Maturity AES 800. Plant height tall, 190cm. Ear height 65cm. Combining ability similar to B73 in cross with Mo17. Seed medium, smooth, yellow dent type. Highly resistant to leaf-whorl feeding by first generation European corn borer (Ostrinia nubilalis). Good resistance to diseases under Iowa conditions. Good resistance to root and stalk lodging. Spring Annual. Breeding Material. Seed.

PI 539873. Elytrigia spicata (Pursh) D. R. Dewey POACEAE Bluebunch wheatgrass

Donated by: Young, G., Soil Conservation Service -- USDA, Plant Materials Center, P.O. Box AA, Aberdeen, Idaho, United States. remarks: Goldar Bluebunch Wheatgrass. Received April 11, 1990.

origin: United States. origin institute: Soil
Conservation Service - USDA, Plant Materials Center, P.O.
Box AA, Aberdeen, Idaho 83210. cultivar: GOLDAR.
pedigree: Selected from native collection from Asotin
Co., Washington. collected: 1934. other id: 9002950.
other id: t2950. other id: P739. remarks: Densely
tufted, abundant culms. Leaves 60-100cm tall, leaf
sheaths glabrous, blades flat to loosely involute, 2-4mm
wide. Foliage slightly to moderately glaucus, blue-green
color, becoming flaucus to bluish on dry sites. Spikes
generally loose, open, with spikelets about same length
as rachis internodes. Spikelet lemma awns 1-2cm long and
strongly divergent at maturity. Anthers dehisce outside.
received as: Pseudoroegneria spicata. Perennial.
Cultivar. Seed.

PI 539874 to 539880. Avena sativa L. POACEAE Spring oat

Donated by: Kolb, F.L., Illinois Agr. Exp. Sta., Dept. of Agronomy, Univ. of Illinois, Urbana, Illinois, United States; and Agricultural Research Service -- USDA. remarks: Seven Spring Oat Germplasm Lines Tolerant to Barley Yellow Dwarf Virus. Received April 12, 1990.

- PI 539874 origin: United States. origin institute: University of Illinois, Dept. of Agronomy, Urbana, Illinois 61801. cultivar: IL 86-6404. pedigree: Coker 227//CI 5068/CI 8074/3/Coker 227//Clintford/Portal/4/ MO 06425//Otee/Noble. other id: GP-47. source: Crop Sci. 31(1):240 1991. group: CSR-OAT. remarks: Excellent barley yellow dwarf virus tolerance. Moderately resistant or moderately susceptible to races of crown rust (Puccinia coronada) prevalent in Illinois. Moderately resistant to loose smut (Ustilago avenae). Maturity several days later than Ogle. Plants shorter than Ogle. Kernel type good. Spring Annual. Breeding Material. Seed.
- PI 539875 origin: United States. origin institute: University of Illinois, Dept. of Agronomy, Urbana, Illinois 61801. cultivar: IL 86-5698. pedigree: Egdolon 26/Clintford/Tyler/Orbit/3/Coker 227//Clintford/Portal/4/MO 06425//Otee/Noble. other id: GP-48. source: Crop Sci. 31(1):240 1991. group: CSR-OAT. remarks: Excellent barley yellow dwarf virus tolerance. Resistant or moderately resistant to races of crown rust (Puccinia coronada) prevalent in Illinois. Moderately resistant to loose smut (Ustilago avenae). Maturity several days later than Ogle. Plants taller than Ogle. Kernel type excellent. Spring Annual. Breeding Material. Seed.
- PI 539876 origin: United States. origin institute: University of Illinois, Dept. of Agronomy, Urbana, Illinois 61801. cultivar: IL 86-5262. pedigree: MO 06425//Otee/Noble/4/Coker 227//CI 5068/CI 8074/3/Larry. other id: GP-49. source: Crop Sci. 31(1):240 1991. group: CSR-OAT. remarks: Excellent barley yellow dwarf virus tolerance. Moderately resistant to moderately susceptible to races of crown rust (Puccinia coronada) prevalent in Illinois. Resistant to loose smut (Ustilago avenae). Maturity several days later than Ogle. Plants height same as Ogle. Kernel type excellent. Spring Annual. Breeding Material. Seed.
- PI 539877 origin: United States. origin institute: University of Illinois, Dept. of Agronomy, Urbana, Illinois 61801. cultivar: IL 86-4407. pedigree: Lang/3/Coker 227//Clintford/Portal/4/Coker 227//CI 5068/CI 8074/3/Larry. other id: GP-50. source: Crop Sci. 31(1):240 1991. group: CSR-OAT. remarks: Excellent barley yellow dwarf virus tolerance. Resistant or moderately resistant to races of crown rust (Puccinia coronada) prevalent in Illinois. Moderately resistant to loose smut (Ustilago avenae). Maturity several days later than Ogle. Plants taller than Ogle. Kernel type good. Spring Annual. Breeding Material. Seed.

- PI 539878 origin: United States. origin institute: University of Illinois, Dept. of Agronomy, Urbana, Illinois 61801. cultivar: IL 86-4189. pedigree: Lang/3/Coker 227//Clintford/Portal/4/Noble/3/Coker 227//Clintford/Portal. other id: GP-51. source: Crop Sci. 31(1):240 1991. group: CSR-OAT. remarks: Excellent barley yellow dwarf virus tolerance. Moderately susceptible or susceptible to races of crown rust (Puccinia coronada) prevalent in Illinois. Susceptible to loose smut (Ustilago avenae). Maturity same as Ogle. Plants taller than Ogle. Kernel type excellent. Spring Annual. Breeding Material. Seed.
- PI 539879 origin: United States. origin institute: University of Illinois, Dept. of Agronomy, Urbana, Illinois 61801. cultivar: IL 86-1150. pedigree: Ogle*2/3/Coker 227//CI 5068/CI 8074. other id: GP-52. source: Crop Sci. 31(1):240 1991. group: CSR-OAT. remarks: Excellent barley yellow dwarf virus tolerance. Moderately resistant to races of crown rust (Puccinia coronada) prevalent in Illinois. Resistant to loose smut (Ustilago avenae). Maturity several days later than Ogle. Plants taller than Ogle. Kernel type good. Spring Annual. Breeding Material. Seed.
- PI 539880 origin: United States. origin institute: University of Illinois, Dept. of Agronomy, Urbana, Illinois 61801. cultivar: IL 85-1538. pedigree: Hazel/Coker 81B151. other id: GP-53. source: Crop Sci. 31(1):240 1991. group: CSR-OAT. remarks: Excellent barley yellow dwarf virus tolerance. Resistant to races of crown rust (Puccinia coronada) prevalent in Illinois. Resistant to loose smut (Ustilago avenae). Maturity several days later than Ogle. Plants height same as Ogle. Kernel dark striped. Spring Annual. Breeding Material. Seed.
- PI 539881 to 539914. Helianthus hybrid ASTERACEAE Sunflower

Donated by: Seiler, G.J., Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota, United States; and North Dakota Agr. Exp. Sta.. remarks: Six Interspecific Sunflower Germplasms Fifteen Interspecific Sunflower Germplasms. Received April 12, 1990.

- PI 539881 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: PET-PET-1741-2. pedigree: nms P21*2/H. petiolaris ssp. petiolaris (Acc 1741) F4 (48 pl.) bulk. other id: GP-142. group: CSR-SUNFLOWER. remarks: Plants single headed, height 135cm. Flowering (50%) 54 days after planting. Self-compatibility (seed set under bags) 45%. Viable pollen staining 90%. 100 seed weight 7.0g. Test weight 349 kg/m3. Oil content 42.5%. Potential resistance to Homoeosoma electellum (sunflower head moth). Spring Annual. Breeding Material. Seed.
- PI 539882 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: PET-PET-1741-1. pedigree: cmsHA89*2/H. petiolaris ssp. petiolaris (Acc 1741) F3 pl.) bulk. other id: GP-141. group: CSR-SUNFLOWER. remarks: Plants multiple branches and heads, height 100cm. Flowering (50%) 59 days after planting. Self-compatibility (seed set under bags) 40%. Viable pollen staining 89%. 100 seed weight 2.3g. Test weight 452 kg/m3. Oil content 40.0%. Resistance to Homoeosoma electellum (sunflower head moth). Spring Annual. Breeding Material. Seed.
- PI 539883 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: PRA-RUN-1329-1. pedigree: nms P21*3/H. praecox ssp. runyonii (ACC 1329) F3 Sibbed one generation. Selfed one generation. remarks: Plants single headed, height 130cm. Flowering (50%) 58 days after planting. Self-compatibility (seed set under bags) 53%. Viable pollen staining 90%. 100 seed weight 9.0g. Test weight 291 kg/m3. Oil content 34.7%. Potential resistance to Plasmopara halstedii (downy mildew). Spring Annual. Breeding Material. Seed.
- PI 539884 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: PRA-RUN-417-3. pedigree: cms89*3/H. praecox ssp. runyonii (ACC 417)//RHA 274 F4 Selfed three generations. remarks: Plants mixed, both multiple branches and heads and single headed, height 120cm. Flowering (50%) 59 days after planting. Self-compatibility (seed set under bags) 20%. Viable pollen staining 80%. 100 seed weight 2.8g. Test weight 434 kg/m3. Oil content 37.0%. Resistance to Plasmopara halstedii (downy mildew). Spring Annual. Breeding Material. Seed.

- PI 539885 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: PRA-RUN-417-2. pedigree: cms89*3/H. praecox ssp. runyonii (ACC 417)F3 Sibbed two generations. remarks: Plants multiple branches and heads, height 110cm. Flowering (50%) 59 days after planting. Self-compatibility (seed set under bags) 2%. Viable pollen staining 35%. 100 seed weight 2.9g. Test weight 477 kg/m3. Oil content 38.7%. Resistant to Plasmopara halstedii (downy mildew). Spring Annual. Breeding Material. Seed.
- PI 539886 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: PRA-RUN-417-1. pedigree: cms89*3/H. praecox ssp. runyonii (ACC 417)F3 praecox ssp. runyonii (PI 435850)). Sibbed two generations. remarks: Plants single headed, height 90cm. Flowering (50%) 60 days after planting. Self-compatibility (seed set under bags) 5%. Viable pollen staining 20%. 100 seed weight 4.3g. Test weight 409 kg/m3. Oil content 41.0%. Resistance to Plasmopara halstedii (downy mildew). Spring Annual. Breeding Material. Seed.
- PI 539887 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: ARG-1575-4. pedigree: nms P21*3/H. argophyllus (ACC 1575) F3 Sibbed one generation, selfed one generation. remarks: Plants single headed, height 110cm. Flowering (50%) 62 days after planting. Self-compatibility (seed set under bags) 52%. Viable pollen staining 97%. 100 seed weight 4.2g. Test weight 352 kg/m3. Oil content 33.5%. Water stress tolerance. Spring Annual. Breeding Material. Seed.
- PI 539888 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: ARG-1575-3. pedigree: nms P21*3/H. argophyllus (ACC 1575)F3 Sibbed one generation, selfed one generation. remarks: Plants multiple branches and heads, height 150cm. Flowering (50%) 65 days after planting. Self-compatibility (seed set under bags) 5%. Viable pollen staining 60%. 100 seed weight 2.5g. Test weight 311 kg/m3. Oil content 29.3%. Water stress tolerance. Spring Annual. Breeding Material. Seed.

- PI 539889 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: ARG-1575-2. pedigree: cmsHA 89*3/H. argophyllus (ACC 1575)F5 Sibbed two generations, selfed two generations. remarks: Plants single headed, height 110cm. Flowering (50%) 60 days after planting. Self-compatibility (seed set under bags) 20%. Viable pollen staining 65%. 100 seed weight 5.6g. Test weight 414 kg/m3. Oil content 37.1%. Water stress tolerance. Spring Annual. Breeding Material. Seed.
- PI 539890 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: ARG-1575-1. pedigree: cmsHA 89*3/H. argophyllus (ACC 1575)F5 Sibbed two generations, selfed two generations. remarks: Plants multiple branches and heads, height 110cm. Flowering (50%) 60 days after planting. Self-compatibility (seed set under bags) 50%. Viable pollen staining 90%. 100 seed weight 2.1g. Test weight 472 kg/m3. Oil content 46.5%. Water stress tolerance. Spring Annual. Breeding Material. Seed.
- PI 539891 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: ARG-420. pedigree: cmsHA 89*2/H. argophyllus (Acc 420) F4 (34 pl.) bulk. other id: GP-137. group: CSR-SUNFLOWER. remarks: Plants single headed, height 110cm. Flowering (50%) 58 days after planting. Self-compatibility (seed set under bags) 20%. Viable pollen staining 95%. 100 seed weight 5.2g. Test weight 335 kg/m3. Oil content 39.5%. Water stress tolerance. Spring Annual. Breeding Material. Seed.
- PI 539892 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: BOL-774. pedigree: cmsHA 89*3/H. bolanderi (Acc 774) F3 (34 pl.) bulk. other id: GP-143. group: CSR-SUNFLOWER. remarks: Plants single headed, height 80cm. Flowering (50%) 55 days after planting. Self-compatibility (seed set under bags) 55%. Viable pollen staining 96%. 100 seed weight 4.2g. Test weight 388 kg/m3. Oil content 38.0%. Linoleic content. Germination polymorphism. Spring Annual. Breeding Material. Seed.

- PI 539893 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: ANO-1509-2. pedigree: cmsHA 89*2/H. anomalus (Acc 1509)//RHA 265 F4 (38 pl.) bulk. other id: GP-136. group: CSR-SUNFLOWER. remarks: Plants single headed, height 75cm. Flowering (50%) 60 days after planting. Self-compatibility (seed set under bags) 10%. Viable pollen staining 77%. 100 seed weight 2.9g. Test weight 391 kg/m3. Oil content 34.5%. Water stress tolerance. Spring Annual. Breeding Material. Seed.
- PI 539894 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: ANO-1509-1. pedigree: cmsHA 89*2/H. anomalus (Acc 1509)//RHA 265 F4 (40 pl.) bulk. other id: GP-135. group: CSR-SUNFLOWER. remarks: Plants single headed, height 100cm. Flowering (50%) 62 days after planting. Self-compatibility (seed set under bags) 10%. Viable pollen staining 75%. 100 seed weight 3.7g. Test weight 386 kg/m3. Oil content 33.2%. Water stress tolerance. Spring Annual. Breeding Material. Seed.
- PI 539895 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: RES-834-3. pedigree: cmsHA 89*2/H. resinosus (Acc 834) F5(42 pl.) bulk. other id: GP-155. group: CSR-SUNFLOWER. remarks: Plants single headed, height 95cm. Flowering (50%) 60 days after planting. Self-compatibility (seed set under bags) 12%. Viable pollen staining 48%. 100 seed weight 4.1g. Test weight 243 kg/m3. Oil content 32.9%. Plants remain green after physiological maturity. Spring Annual. Breeding Material. Seed.
- PI 539896 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: RES-834-2. pedigree: cmsHA 89*2/H. resinosus (Acc 834) F4(38 pl.) bulk. other id: GP-154. group: CSR-SUNFLOWER. remarks: Plants mixed, both multiple branches and heads and single headed, height 75cm. Flowering (50%) 54 days after planting. Self-compatibility (seed set under bags) 9%. Viable pollen staining 50%. 100 seed weight 2.9g. Test weight 386 kg/m3. Oil content 29.5%. Spring Annual. Breeding Material. Seed.

PI 539881 to 539914-continued

- PI 539897 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: RES-834-1. pedigree: cmsHA 89*2/H. resinosus (Acc 834) F5 (50 pl.) bulk. other id: GP-153. group: CSR-SUNFLOWER. remarks: Plants single-headed, height 90cm. Flowering (50%) 55 days after planting. Self-compatibility (seed set under bags) 12%. Viable pollen staining 85%. 100 seed weight 5.6g. Test weight 364 kg/m3. Oil content 43.9%. Spring Annual. Breeding Material. Seed.
- PI 539898 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: PRA-HIR 437. pedigree: cmsHA 89*3/H. pracecox ssp. hirtus (Acc 437) F4 (33 pl.) bulk. other id: GP-148. group: CSR-SUNFLOWER. remarks: Plants single-headed, height 130cm. Flowering (50%) 59 days after planting. Self-compatibility (seed set under bags) 20%. Viable pollen staining 98%. 100 seed weight 5.0g. Test weight 418 kg/m3. Oil content 30.0%. Spring Annual. Breeding Material. Seed.
- PI 539899 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: PAR-1673-1. pedigree: cmsHA 89*2/H. paradoxus (ACC 1673)F5 Sibbed one generation, selfed two generations. remarks: Plants single-headed, height 100cm. Flowering (50%) 55 days after planting. Self-compatibility (seed set under bags) 40%. Viable pollen staining 86%. 100 seed weight 4.1g. Test weight 389 kg/m3. Oil content 39.5%. Potential tolerance to salt. Spring Annual. Breeding Material. Seed.
- PI 539900 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: PAR-1673-2. pedigree: cmsHA 89*3/H. paradoxus (ACC 1673) F4 Sibbed one generation, selfed two generations. remarks: Plants single-headed, height 120cm. Flowering (50%) 58 days after planting. Self-compatibility (seed set under bags) 49%. Viable pollen staining 90%. 100 seed weight 4.9g. Test weight 422 kg/m3. Oil content 42.0%. Potential tolerance to salt. Spring Annual. Breeding Material. Seed.

- PI 539901 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: PAR-1084. pedigree: cmsHA 89*2/H. paradoxus (Acc 1084) F5 (50 pl.) bulk. other id: GP-138. group: CSR-SUNFLOWER. remarks: Plants single-headed, height 100cm. Flowering (50%) 57 days after planting. Self-compatibility (seed set under bags) 55%. Viable pollen staining 95%. 100 seed weight 5.4g. Test weight 384 kg/m3. Oil content 37.6%. Potential tolerance to salt. Spring Annual. Breeding Material. Seed.
- PI 539902 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: PAR-1671-2. pedigree: cmsHA 89*2/H. paradoxus (Acc 1671) F3 (29 pl.) bulk. other id: GP-140. group: CSR-SUNFLOWER. remarks: Plants single-headed, height 100cm. Flowering (50%) 60 days after planting. Self-compatibility (seed set under bags) 21%. Viable pollen staining 90%. 100 seed weight 5.1g. Test weight 394 kg/m3. Oil content 39.1%. Potential tolerance to salt. Spring Annual. Breeding Material. Seed.
- PI 539903 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: PAR-1671-1. pedigree: cmsHA 89*4/H. paradoxus (Acc 1671) F3 (39 pl.) bulk. other id: GP-139. group: CSR-SUNFLOWER. remarks: Plants single-headed, height 950cm. Flowering (50%) 50 days after planting. Self-compatibility (seed set under bags) 20%. Viable pollen staining 94%. 100 seed weight 4.6g. Test weight 399 kg/m3. Oil content 46.8%. Potential tolerance to salt. Spring Annual. Breeding Material. Seed.
- origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: NEG-1255. pedigree: nms P21*2/H. neglectus (Acc 1255) F3 (28 pl.) bulk. other id: GP-147. group: CSR-SUNFLOWER. remarks: Plants single-headed, height 120cm. Flowering (50%) 58 days after planting. Self-compatibility (seed set under bags) 28%. Viable pollen staining 90%. 100 seed weight 5.5g. Test weight 368 kg/m3. Oil content 35.0%. Spring Annual. Breeding Material. Seed.

- PI 539905 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: HIR-1734-4. pedigree: cmsHA 89*2/H. hirsutus (Acc 1734) F5 (40 pl.) bulk. other id: GP-152. group: CSR-SUNFLOWER. remarks: Plants single-headed, height segregating (tall = 110cm, short = 70cm). Flowering (50%) 54 days after planting. Self-compatibility (seed set under bags) 45%. Viable pollen staining 88%. 100 seed weight 3.6g. Test weight 362 kg/m3. Oil content 37.9%. Spring Annual. Breeding Material. Seed.
- PI 539906 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: HIR-1734-2. pedigree: cmsHA 89*2/H. hirsutus (Acc 1734) F3 (29 pl.) bulk. other id: GP-151. group: CSR-SUNFLOWER. remarks: Plants multiple branches and heads, height 90cm. Flowering (50%) 55 days after planting. Self-compatibility (seed set in bags) 30%. Viable pollen staining 98%. 100 seed weight 2.7g. Test weight 301 kg/m3. Oil content 35.7%. Spring Annual. Breeding Material. Seed.
- PI 539907 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: HIR-1734-1. pedigree: cmsHA 89*2/H. hirsutus (Acc 1734) Fc (40 pl.) bulk. other id: GP-150. group: CSR-SUNFLOWER. remarks: Plants single headed, height 120cm. Flowering (50%) 54 days after planting. Self-compatibility (seed set in bags) 48%. Viable pollen staining 90%. 100 seed weight 3.7g. Test weight 369 kg/m3. Oil content 40.0%. Plants remain green after physiological maturity. Spring Annual. Breeding Material. Seed.
- PI 539908 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: DEB-SIL-367-2. pedigree: cmsHA 89*3/H. debilis ssp. silvestris (Acc 367) F3 (32 pl.) bulk. other id: GP-145. group: CSR-SUNFLOWER. remarks: Plants single headed, height 100cm. Flowering (50%) 55 days after planting. Self-compatibility (seed set in bags) 35%. Viable pollen staining 80%. 100 seed weight 5.9g. Test weight 457 kg/m3. Oil content 42.5%. Spring Annual. Breeding Material. Seed.

- PI 539909 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: DEB-SIL-367-1. pedigree: cmsHA89*3/H. debilis ssp. silvestris (Acc 367) F3 (39 pl.) bulk. other id: GP-144. group: CSR-SUNFLOWER. remarks: Plants multiple branches and heads, height 90cm. Flowering (50%) 58 days after planting. Self-compatibility (seed set under bags) 38%. Viable pollen staining 80%. 100 seed weight 3.6g. Test weight 290 kg/m3. Oil content 30.0%. Spring Annual. Breeding Material. Seed.
- PI 539910 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: PRA-PRA-1142. pedigree: nms P21*2/H. praecox ssp. praecox (Acc 1142) F5 (31 pl.) bulk. other id: GP-149. group: CSR-SUNFLOWER. remarks: Plants single-headed, height 110cm. Flowering (50%) 56 days after planting. Self-compatibility (seed set under bags) 20%. Viable pollen staining 94%. 100 seed weight 8.7g. Test weight 364 kg/m3. Oil content 38.3%. Spring Annual. Breeding Material. Seed.
- PI 539911 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: DEB-CUC-1810. pedigree: nms P21*3/H. debilis ssp. cucumerifolius (Acc 1810) F3 (28 pl.) bulk. other id: GP-146. group: CSR-SUNFLOWER. remarks: Plants single-headed, height 110cm. Flowering (50%) 60 days after planting. Self-compatibility (seed set under bags) 32%. Viable pollen staining 68%. 100 seed weight 6.1g. Test weight 362 kg/m3. Oil content 36.8%. Spring Annual. Breeding Material. Seed.
- PI 539912 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: DES-1474-1. pedigree: cms89*2/H. deserticola (ACC 1474)//RHA 274 F4 Sibbed two generations. remarks: Plants multiple branches and heads, height 110cm. Flowering (50%) 57 days after planting. Self-compatibility (seed set under bags) 35%. Viable pollen staining 85%. 100 seed weight 2.0g. Test weight 435 kg/m3. Oil content 44.0%. Water stress tolerance. Spring Annual. Breeding Material. Seed.

PI 539881 to 539914-continued

- PI 539913 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: DES-1474-2. pedigree: cms89*2/H. deserticola (ACC 1474)//RHA 274 F4. Sibbed two generations. remarks: Plants single headed, height 90cm. Flowering (50%) 55 days after planting. Self-compatibility (seed set under bags) 59%. Viable pollen staining 86%. 100 seed weight 4.9g. Test weight 337 kg/m3. Oil content 40.0%. Water stress tolerance. Spring Annual. Breeding Material. Seed.
- PI 539914 origin: United States. origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105. cultivar: DES-1474-3. pedigree: cms89*2/H. deserticola (ACC 1474)//RHA 265 F5 Sibbed two generations. remarks: Plants single headed, height 100cm. Flowering (50%) 58 days after planting. Self-compatibility (seed set under bags) 30%. Viable pollen staining 95%. 100 seed weight 4.6g. Test weight 305 kg/m3. Qil content 39.5%. Water stress tolerance. Spring Annual. Breeding Material. Seed.
- PI 539915 to 539916. Linum usitatissimum L. LINACEAE Flax

Donated by: Miller, J.F., Flax Collection, North Dakota State University, P.O. Box 5677, Fargo, North Dakota, United States. Received 1990.

- PI 539915 donor id: CIli 3292. origin: Canada. cultivar: SOMME. pedigree: FP705/NORLIN. Annual. Cultivar. Seed.
- PI 539916 donor id: CIli 3293. origin: Canada. cultivar: FLANDERS. pedigree: MCG/DUF. Annual. Cultivated. Seed.
- PI 539917. Hordeum vulgare L. POACEAE Barley

Donated by: Busch Agricuttural Resources Inc., United States. Received April 16, 1990.

origin: United States. cultivar: DUEL. other id: PVP
9000119. source: Pending. group: PVPO. Cultivar.
Seed.

PI 539918. Gossypium hirsutum L. MALVACEAE Cotton

Donated by: Calif. Planting Cotton Seed Distributors, United States. Received April 16, 1990.

PI 539918-continued

origin: United States. cultivar: CPCSD ACALA C-37. other id: PVP 9000120. source: Pending. group: PVPO. Cultivar. Seed.

PI 539919. Lycopersicon esculentum Miller SOLANACEAE Tomato

Donated by: Florida Agr. Exp. Sta., United States. Received April 16, 1990.

origin: United States. cultivar: MICRO-TOM. other id: PVP 9000121. source: Pending. group: PVPO. Cultivar. Seed.

PI 539920 to 539927. Zea mays L. subsp. mays POACEAE Corn

Donated by: Holden's Foundation Seeds, Inc., United States. Received April 16, 1990.

- PI 539920 origin: United States. cultivar: LH 160. other id: PVP 9000122. source: Pending. group: PVPO. Cultivar. Seed.
- PI 539921 origin: United States. cultivar: LH 162. other id: PVP 9000123. source: Pending. group: PVPO. Cultivar. Seed.
- PI 539922 origin: United States. cultivar: LH 190. other id: PVP 9000124. source: Pending. group: PVPO. Cultivar. Seed.
- PI 539923 origin: United States. cultivar: LH 194. other id: PVP 9000125. source: Pending. group: PVPO. Cultivar. Seed.
- PI 539924 origin: United States. cultivar: LH 202. other id: PVP 9000126. source: Pending. group: PVPO. Cultivar. Seed.
- PI 539925 origin: United States. cultivar: LH 191. other id: PVP 9000139. source: Pending. group: PVPO. Cultivar. Seed.
- PI 539926 origin: United States. cultivar: LH 192. other id: PVP 9000140. source: Pending. group: PVPO. Cultivar. Seed.
- PI 539927 origin: United States. cultivar: LH 193. other id: PVP 9000141. source: Pending. group: PVPO. Cultivar. Seed.

PI 539928 to 539929. Phaseolus vulgaris L. FABACEAE Snap bean

Donated by: Rogers Brothers Seed Co., United States. Received April 16, 1990.

PI 539928 origin: United States. cultivar: KENTUCKY BLUE. other id: PVP 9000127. source: Pending. group: PVPO. Cultivar. Seed.

PI 539929 origin: United States. cultivar: MINIDOKA. other id: PVP 9000128. source: Pending. group: PVPO. Cultivar. Seed.

PI 539930. Zea mays L. subsp. mays POACEAE Corn

Donated by: Dahlgren & Co., Inc., United States. Received April 16, 1990.

origin: United States. cultivar: RS 710. other id: PVP 9000129. source: Pending. group: PVPO. Cultivar. Seed.

PI 539931. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: D.J. Van der Have B.V., United States. Received April 16, 1990.

origin: United States. cultivar: SAPPHIRE. other id:
PVP 9000130. source: Pending. group: PVPO. Cultivar.
Seed.

PI 539932. Brassica oleracea L. BRASSICACEAE Cauliflower

Donated by: Nickerson-Zwaan b.v., United States. Received April 16, 1990.

origin: United States. cultivar: FLORIADE. other id:
PVP 9000131. source: Pending. group: PVPO. Cultivar.
Seed.

PI 539933. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: Meyer, W., Pure-Seed Testing, Inc., 3057 G. Street, Hubbard, Oregon, United States. Received April 16, 1990.

origin: United States. cultivar: ELDORADO. other id: PVP 9000133. source: Pending. group: PVPO. Cultivar. Seed.

PI 539934. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: Meyer, W., Pure-Seed Testing, Inc., 3057 G. Street, Hubbard, Oregon, United States. Received April 16, 1990.

origin: United States. cultivar: OLYMPIC II. pedigree: Advanced generation synthetic from two cycles of phenotypic selection. Parents trace back to Olympic, Apache and selections from old turf in New Jersey. other id: PVP 9000134. source: Pending. group: PVPO. other id: 5OL. other id: PST-5OL. remarks: Maturity medium. Low growing turf-type with improved performance in summer, spring and fall. Improved resistance to brown patch (Rhizoctonia solani). Good heat, cold, shade and wear tolerance. Improved seed yield. Perennial. Cultivar. Seed.

PI 539935. Brassica chinensis L. BRASSICACEAE Pak-choi

Donated by: Alf Christianson Seed Co., United States. Received April 16, 1990.

origin: United States. cultivar: MING CHOI. other id: PVP 9000135. source: Pending. group: PVPO. received as: B. campestris subsp. chinensis. Cultivar. Seed.

PI 539936. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Asgrow Seed Co., United States. Received April 16, 1990.

origin: United States. cultivar: A 4715. other id: PVP
9000136. source: Pending. group: PVPO. Cultivar.
Seed.

PI 539937. Lactuca sativa L. ASTERACEAE Lettuce

Donated by: Central Valley Seeds, Inc., United States. Received April 16, 1990.

origin: United States. cultivar: DARKLAND COS. other id: PVP 9000137. source: Pending. group: PVPO. Cultivar. Seed.

PI 539938. Gossypium hirsutum L. MALVACEAE Cotton

Donated by: Ellis Brothers Seed, Inc., United States. Received April 16, 1990.

PI 539938-continued

origin: United States. cultivar: S1001. other id: PVP 9000138. source: Pending. group: PVPO. Cultivar. Seed.

PI 539939. Lactuca sativa L. ASTERACEAE Lettuce

Donated by: Vilmorin S.A., United States. Received April 16, 1990.

origin: United States. cultivar: SIERRA. other id: PVP 9000142. source: Pending. group: PVPO. Cultivar. Seed.

PI 539940 to 540252. Sorghum bicolor (L.) Moench POACEAE Sorghum

Donated by: Voigt, R.L., University of Arizona, USAID Sorghum/Millet Program, Tucson, Arizona, United States; and El Lakany, M.A., Field Crop Division, UN Development Program, FAO, Taiz, Yemen Arab Republic. Received February 26, 1990.

- PI 539940 donor id: 1205. origin: Yemen Arab Republic. locality:
 Arab Eriyan. elevation: 1800m. remarks: Race Caudatum
 durra. Head type 7 very compact, ovate, flattened base,
 with usually a recurved peduncle. Seed brown.
 Cultivated. Seed.
- PI 539941 donor id: 1312. origin: Yemen Arab Republic. locality:
 Mouza. elevation: 250m. remarks: Race Durra caudatum.
 Head type 3 open, elongated, elliptical. Seed white.
 Cultivated. Seed.
- PI 539942 donor id: 1523. origin: Yemen Arab Republic. locality:
 Mawiyah. elevation: 1200m. remarks: Race Caudatum
 durra. Head type 5 semi-compact, ovate. Seed light tan.
 Cultivated. Seed.
- PI 539943 donor id: 1674. origin: Yemen Arab Republic. locality:
 Al Hagaheg. elevation: 200m. remarks: Race Durra
 Kafir. Head type 4 semi-open, elongated, elliptical.
 Seed orange and white. Cultivated. Seed.
- PI 539944 donor id: 1741. origin: Yemen Arab Republic. locality:
 Al Garei Hiya. elevation: 215m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seed
 light orange. Cultivated. Seed.
- PI 539945 donor id: 1817. origin: Yemen Arab Republic. locality:
 Surdut. elevation: 210m. remarks: Race Kafir
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seed light tan. Cultivated. Seed.

- PI 539946 donor id: 1988. origin: Yemen Arab Republic. locality:
 Al Galah. elevation: 210m. remarks: Race Caudatum
 durra. Head type 5 semi-compact, ovate. Seed light tan
 and light red. Cultivated. Seed.
- PI 539947 donor id: 2287. origin: Yemen Arab Republic. locality:
 Kahre. elevation: 175m. remarks: Race Caudatum durra.
 Head type 4 semi-open, elongated, elliptical. Seed
 light orange. Cultivated. Seed.
- PI 539948 donor id: 2311. origin: Yemen Arab Republic. locality:
 Mahal Al Dabek. elevation: 170m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seed light orange. Cultivated. Seed.
- PI 539949 donor id: 2331. origin: Yemen Arab Republic. locality:
 Kahre. elevation: 200m. remarks: Race Caudatum durra.
 Head type 6 semi-compact, elliptical. Seed light
 orange. Cultivated. Seed.
- PI 539950 donor id: 2354. origin: Yemen Arab Republic. locality:
 Kwober. elevation: 220m. remarks: Race Durra
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seed white. Cultivated. Seed.
- PI 539951 donor id: 2576. origin: Yemen Arab Republic. locality:
 Al Himeh. elevation: 1470m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seed yellow
 orange. Cultivated. Seed.
- PI 539952 donor id: 2603. origin: Yemen Arab Republic. locality:
 Al Himeh. elevation: 1870m. remarks: Race Durra
 kafir. Head type 5 semi-compact, ovate. Seed yellow
 white. Cultivated. Seed.
- PI 539953 donor id: 2606. origin: Yemen Arab Republic. locality:

 Mwsanh. elevation: 1370m. remarks: Race Caudatum
 durra. Head type 7 very compact, ovate, flattened base,
 with usually a recurved peduncle. Seed white.
 Cultivated. Seed.
- PI 539954 donor id: 2611. origin: Yemen Arab Republic. locality:
 Mwsanh. elevation: 1370m. remarks: Race Durra kafir.
 Head type 5 semi-compact, ovate. Seed yellow.
 Cultivated. Seed.
- PI 539955 donor id: 2612. origin: Yemen Arab Republic. locality:
 Mwsanh. elevation: 1370m. remarks: Race Caudatum.
 Head type 5 semi-compact, ovate. Seed white.
 Cultivated. Seed.

- PI 539956 donor id: 2613. origin: Yemen Arab Republic. locality:
 Mwsanh. elevation: 1370m. remarks: Race Caudatum.
 Head type 5 semi-compact, ovate. Seed white.
 Cultivated. Seed.
- PI 539957 donor id: 2617. origin: Yemen Arab Republic. locality:
 Mwsanh. elevation: 1370m. remarks: Race Caudatum.
 Head type 4 semi-open, elongated, elliptical. Seed
 white. Cultivated. Seed.
- PI 539958 donor id: 2712. origin: Yemen Arab Republic. locality:
 Bait Al Nahme. elevation: 780m. remarks: Race Caudatum. Head type 4 semi-open, elongated, elliptical.
 Seed tan and white. Cultivated. Seed.
- PI 539959 donor id: 2770. origin: Yemen Arab Republic. locality:
 Almahwit Bakral Gumah. elevation: 820m. remarks: Race Caudatum durra. Head type 7 very compact, ovate,
 flattened base, with usually a recurved peduncle. Seed
 light brown. Cultivated. Seed.
- PI 539960 donor id: 2853. origin: Yemen Arab Republic. locality:
 Almahwit Sirah. elevation: 1045m. remarks: Race Durra
 kafir. Head type 5 semi-compact, ovate. Seed light
 yellow. Cultivated. Seed.
- PI 539961 donor id: 2982. origin: Yemen Arab Republic. locality:
 Almahwit Al Arkoob. elevation: 1345m. remarks: Race Caudatum. Head type 5 semi-compact, ovate. Seed light
 tan. Cultivated. Seed.
- PI 539962 donor id: 3515. origin: Yemen Arab Republic. locality:
 Bayt Lahmy. elevation: 875m. remarks: Race Caudatum
 durra. Head type 4 semi-open, elongated, elliptical.
 Seed white. Cultivated. Seed.
- PI 539963 donor id: 3570. origin: Yemen Arab Republic. locality:
 Damar Al Falkah. elevation: 2520m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical.
 Seed brown. Cultivated. Seed.
- PI 539964 donor id: 3580. origin: Yemen Arab Republic. locality:
 Damar Al Sowyda. elevation: 2520m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical.
 Seed brown. Cultivated. Seed.
- PI 539965 donor id: 3584. origin: Yemen Arab Republic. locality:
 Damar Al Kadah. elevation: 2540m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical.
 Seed light brown. Cultivated. Seed.

- PI 539966 donor id: 3592. origin: Yemen Arab Republic. locality:
 Damar Al Sowyda. elevation: 2540m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical.
 Seed light brown. Cultivated. Seed.
- PI 539967 donor id: 3602. origin: Yemen Arab Republic. locality:
 Damar Al Kasah. elevation: 2540m. remarks: Race Durra
 caudatum. Head type 7 very compact, ovate, flattened
 base, with usually a recurved peduncle. Seed brown.
 Cultivated. Seed.
- PI 539968 donor id: 3610. origin: Yemen Arab Republic. locality:
 Damar Al Kasah. elevation: 2540m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base,
 with usually a recurved peduncle. Seed yellow.
 Cultivated. Seed.
- PI 539969 donor id: 3644. origin: Yemen Arab Republic. locality:
 Damar Al Sowyda. elevation: 2470m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 539970 donor id: 3653. origin: Yemen Arab Republic. locality:
 Damar Bayt Al Mashry. elevation: 2450m. remarks: Race Durra. Head type 5 semi-compact, ovate. Seed yellow.
 Cultivated. Seed.
- PI 539971 donor id: 3689. origin: Yemen Arab Republic. locality:
 Al Homh Damar. elevation: 2230m. remarks: Race Durra
 kafir. Head type 5 semi-compact, ovate. Seed yellow.
 Cultivated. Seed.
- PI 539972 donor id: 3699. origin: Yemen Arab Republic. locality:
 Damar Shareh. elevation: 2050m. remarks: Race Durra.
 Head type 7 very compact, ovate, flattened base, with
 usually a recurved peduncle. Seed yellow. Cultivated.
 Seed.
- PI 539973 donor id: 3760. origin: Yemen Arab Republic. locality:
 Damar Rada Al Kahir. elevation: 2000m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seed
 yellow tan. Cultivated. Seed.
- PI 539974 donor id: 3761. origin: Yemen Arab Republic. locality:
 Damar Rada Al Kahir. elevation: 2000m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seed
 yellow. Cultivated. Seed.
- PI 539975 donor id: 3770. origin: Yemen Arab Republic. locality:
 Damar Al Kahir. elevation: 2000m. remarks: Race Durra. Head type 5 semi-compact, ovate. Seed yellow.
 Cultivated. Seed.

- PI 539976 donor id: 3780. origin: Yemen Arab Republic. locality:
 Damar Al Kahir. elevation: 2000m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seed tan.
 Cultivated. Seed.
- PI 539977 donor id: 3803. origin: Yemen Arab Republic. locality:
 Damar Al Kahir. elevation: 2000m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base,
 with usually a recurved peduncle. Seed yellow.
 Cultivated. Seed.
- PI 539978 donor id: 3809. origin: Yemen Arab Republic. locality:
 Damar Aswed. elevation: 1990m. remarks: Race Durra.
 Head type 6 semi-compact, elliptical. Seed yellow.
 Cultivated. Seed.
- PI 539979 donor id: 3814. origin: Yemen Arab Republic. locality:
 Damar Aswed. elevation: 1990m. remarks: Race Durra
 kafir. Head type 6 semi-compact, elliptical. Seed light
 orange. Cultivated. Seed.
- PI 539980 donor id: 3818. origin: Yemen Arab Republic. locality:
 Damar. elevation: 1990m. remarks: Race Durra kafir.
 Head type 5 semi-compact, ovate. Seed light yellow.
 Cultivated. Seed.
- PI 539981 donor id: 3819. origin: Yemen Arab Republic. locality:
 Damar. elevation: 1990m. remarks: Race Durra. Head
 type 7 very compact, ovate, flattened base, with
 usually a recurved peduncle. Seed light yellow.
 Cultivated. Seed.
- PI 539982 donor id: 3820. origin: Yemen Arab Republic. locality:
 Damar. elevation: 1990m. remarks: Race Durra kafir.
 Head type 6 semi-compact, elliptical. Seed light
 yellow. Cultivated. Seed.
- PI 539983 donor id: 3821. origin: Yemen Arab Republic. locality:
 Damar. elevation: 1990m. remarks: Race Durra. Head
 type 7 very compact, ovate, flattened base, with
 usually a recurved peduncle. Seed yellow. Cultivated.
 Seed.
- PI 539984 donor id: 3822. origin: Yemen Arab Republic. locality:
 Damar. elevation: 1990m. remarks: Race Durra kafir.
 Head type 7 very compact, ovate, flattened base, with
 usually a recurved peduncle. Seed light yellow.
 Cultivated. Seed.

- PI 539985 donor id: 3823. origin: Yemen Arab Republic. locality:
 Damar. elevation: 1990m. remarks: Race Durra. Head
 type 7 very compact, ovate, flattened base, with
 usually a recurved peduncle. Seed yellow. Cultivated.
 Seed.
- PI 539986 donor id: 3827. origin: Yemen Arab Republic. locality:
 Damar Aswed. elevation: 1990m. remarks: Race Durra.
 Head type 7 very compact, ovate, flattened base, with
 usually a recurved peduncle. Seed light yellow.
 Cultivated. Seed.
- PI 539987 donor id: 3833. origin: Yemen Arab Republic. locality:
 Damar Al Smed. elevation: 1990m. remarks: Race Durra
 kafir. Head type 5 semi-compact, ovate. Seed light
 yellow. Cultivated. Seed.
- PI 539988 donor id: 3848. origin: Yemen Arab Republic. locality:
 Bayda Abass. elevation: 1990m. remarks: Race Durra.
 Head type 6 semi-compact, elliptical. Seed yellow.
 Cultivated. Seed.
- PI 539989 donor id: 3850. origin: Yemen Arab Republic. locality:
 Al Bayda. elevation: 1980m. remarks: Race Durra
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seed yellow. Cultivated. Seed.
- PI 539990 donor id: 3852. origin: Yemen Arab Republic. locality:
 Al Bayda Abass. elevation: 1980m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seed light
 yellow. Cultivated. Seed.
- PI 539991 donor id: 3859. origin: Yemen Arab Republic. locality:
 Al Bayda Abass. elevation: 1980m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base,
 with usually a recurved peduncle. Seed light yellow.
 Cultivated. Seed.
- PI 539992 donor id: 3863. origin: Yemen Arab Republic. locality:
 Al Bayda Abass. elevation: 1980m. remarks: Race Durra
 kafir. Head type 6 semi-compact, elliptical. Seed light
 yellow. Cultivated. Seed.
- PI 539993 donor id: 3870. origin: Yemen Arab Republic. locality:
 Al Bayda Al Swadyah. elevation: 2030m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.
- PI 539994 donor id: 3871. origin: Yemen Arab Republic. locality:
 Al Bayda Al Swadyah. elevation: 2030m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.

- PI 539995 donor id: 3872. origin: Yemen Arab Republic. locality:
 Al Bayda Al Swadyah. elevation: 2030m. remarks: Race Durra kafir. Head type 4 semi-open, elongated,
 elliptical. Seed light yellow. Cultivated. Seed.
- PI 539996 donor id: 3878. origin: Yemen Arab Republic. locality:
 Al Bayda Al Kooh Al Swadyah. elevation: 2030m. remarks:
 Race Durra kafir. Head type 4 semi-open, elongated,
 elliptical. Seed yellow. Cultivated. Seed.
- PI 539997 donor id: 3880. origin: Yemen Arab Republic. locality:
 Al Bayda Al Kooh Al Swadyah. elevation: 2220m. remarks:
 Race Kafir durra. Head type 5 semi-compact, ovate.
 Seed light yellow. Cultivated. Seed.
- PI 539998 donor id: 3886. origin: Yemen Arab Republic. locality:
 Al Bayda Abass. elevation: 1980m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 539999 donor id: 3894. origin: Yemen Arab Republic. locality:
 Al Bayda Abass. elevation: 1980m. remarks: Race Durra. Head type 5 semi-compact, ovate. Seed yellow.
 Cultivated. Seed.
- PI 540000 donor id: 3899. origin: Yemen Arab Republic. locality:
 Al Bayda Abass. elevation: 1980m. remarks: Race Durra. Head type 5 semi-compact, ovate. Seed yellow.
 Cultivated. Seed.
- PI 540001 donor id: 3901. origin: Yemen Arab Republic. locality:
 Al Bayda Al Swadyah. elevation: 2030m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seed
 yellow. Cultivated. Seed.
- PI 540002 donor id: 3902. origin: Yemen Arab Republic. locality:
 Al Bayda Al Swadyah. elevation: 2030m. remarks: Race Kafir durra. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.
- PI 540003 donor id: 3903. origin: Yemen Arab Republic. locality:
 Al Bayda Al Swadyah. elevation: 2030m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seed
 yellow. Cultivated. Seed.
- PI 540004 donor id: 3905. origin: Yemen Arab Republic. locality:
 Al Bayda Al Swadyah. elevation: 2030m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.

- PI 540005 donor id: 3906. origin: Yemen Arab Republic. locality:
 Al Bayda Al Swadyah. elevation: 2030m. remarks: Race Durra kafir. Head type 4 semi-open, elongated,
 elliptical. Seed yellow. Cultivated. Seed.
- PI 540006 donor id: 3908. origin: Yemen Arab Republic. locality:
 Al Bayda Al Swadyah. elevation: 2030m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seed
 yellow. Cultivated. Seed.
- PI 540007 donor id: 3910. origin: Yemen Arab Republic. locality:
 Al Bayda Al Swadyah. elevation: 2030m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540008 donor id: 3913. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2010m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base,
 with usually a recurved peduncle. Seed yellow.
 Cultivated. Seed.
- PI 540009 donor id: 3915. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2010m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seed
 yellow. Cultivated. Seed.
- PI 540010 donor id: 3920. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2010m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540011 donor id: 3926. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2010m. remarks: Race Durra. Head type 5 semi-compact, ovate. Seed yellow.
 Cultivated. Seed.
- PI 540012 donor id: 3930. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2010m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical.
 Seed yellow. Cultivated. Seed.
- PI 540013 donor id: 3935. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2010m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base,
 with usually a recurved peduncle. Seed light yellow.
 Cultivated. Seed.
- PI 540014 donor id: 3936. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2010m. remarks: Race Durra caudatum. Head type 7 very compact, ovate,
 flattened base, with usually a recurved peduncle. Seed
 yellow. Cultivated. Seed.

- PI 540015 donor id: 3937. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2010m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540016 donor id: 3939. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2030m. remarks: Race Durra kafir. Head type 7 very compact, ovate, flattened
 base, with usually a recurved peduncle. Seed light
 yellow. Cultivated. Seed.
- PI 540017 donor id: 3940. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2030m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.
- PI 540018 donor id: 3945. origin: Yemen Arab Republic. locality:
 Al Bayda Al Sweda'a. elevation: 2030m. remarks: Race Durra kafir. Head type 4 semi-open, elongated,
 elliptical. Seed yellow. Cultivated. Seed.
- PI 540019 donor id: 3949. origin: Yemen Arab Republic. locality:
 Al Bayda Al Sweda'a. elevation: 2030m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540020 donor id: 3954. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2030m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seed light yellow. Cultivated. Seed.
- PI 540021 donor id: 3958. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2030m. remarks: Race Kafir durra. Head type 7 very compact, ovate, flattened
 base, with usually a recurved peduncle. Seed light
 yellow. Cultivated. Seed.
- PI 540022 donor id: 3960. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2030m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.
- PI 540023 donor id: 3961. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2030m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base,
 with usually a recurved peduncle. Seed light yellow.
 Cultivated. Seed.
- PI 540024 donor id: 3964. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2030m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.

- PI 540025 donor id: 3965. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2030m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seed
 light yellow. Cultivated. Seed.
- PI 540026 donor id: 3969. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2030m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.
- PI 540027 donor id: 3972. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2000m. remarks: Race Durra caudatum. Head type 7 very compact, ovate,
 flattened base, with usually a recurved peduncle. Seed
 light yellow. Cultivated. Seed.
- PI 540028 donor id: 3973. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2000m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base,
 with usually a recurved peduncle. Seed light yellow.
 Cultivated. Seed.
- PI 540029 donor id: 3975. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2000m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base,
 with usually a recurved peduncle. Seed light yellow.
 Cultivated. Seed.
- PI 540030 donor id: 3977. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2000m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540031 donor id: 3981. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2000m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seed
 light orange. Cultivated. Seed.
- PI 540032 donor id: 3988. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2000m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical.
 Seed light orange and light yellow. Cultivated. Seed.
- PI 540033 donor id: 3991. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2000m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seed light orange. Cultivated. Seed.

- PI 540034 donor id: 3997. origin: Yemen Arab Republic. locality:
 Al Bayda Al Hakil. elevation: 1980m. remarks: Race Durra kafir. Head type 7 very compact, ovate, flattened
 base, with usually a recurved peduncle. Seed light
 yellow. Cultivated. Seed.
- PI 540035 donor id: 4000. origin: Yemen Arab Republic. locality:
 Al Bayda Al Hakil. elevation: 1980m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical.
 Seed light orange. Cultivated. Seed.
- PI 540036 donor id: 4001. origin: Yemen Arab Republic. locality:
 Al Bayda Al Hakil. elevation: 1980m. remarks: Race Durra. Head type 5 semi-compact, ovate. Seed light
 yellow. Cultivated. Seed.
- PI 540037 donor id: 4002. origin: Yemen Arab Republic. locality:
 Al Bayda Al Hakil. elevation: 1980m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical.
 Seed light yellow. Cultivated. Seed.
- PI 540038 donor id: 4007. origin: Yemen Arab Republic. locality:
 Al Bayda Halsah. elevation: 1970m. remarks: Race Durra kafir. Head type 7 very compact, ovate, flattened
 base, with usually a recurved peduncle. Seed light
 yellow. Cultivated. Seed.
- PI 540039 donor id: 4012. origin: Yemen Arab Republic. locality:
 Al Bayda Halsah. elevation: 1970m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seed
 yellow. Cultivated. Seed.
- PI 540040 donor id: 4013. origin: Yemen Arab Republic. locality:
 Al Bayda Halsah. elevation: 1970m. remarks: Race Durra caudatum. Head type 7 very compact, ovate,
 flattened base, with usually a recurved peduncle. Seed
 light yellow. Cultivated. Seed.
- PI 540041 donor id: 4014. origin: Yemen Arab Republic. locality:
 Al Bayda Halsah. elevation: 1970m. remarks: Race Durra caudatum. Head type 7 very compact, ovate,
 flattened base, with usually a recurved peduncle. Seed
 yellow. Cultivated. Seed.
- PI 540042 donor id: 4018. origin: Yemen Arab Republic. locality:
 Al Bayda Makarah. elevation: 1950m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.

- PI 540043 donor id: 4023. origin: Yemen Arab Republic. locality:
 Al Bayda Halsah. elevation: 1970m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base,
 with usually a recurved peduncle. Seed light yellow.
 Cultivated. Seed.
- PI 540044 donor id: 4025. origin: Yemen Arab Republic. locality:
 Al Bayda Halsah. elevation: 1970m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.
- PI 540045 donor id: 4029. origin: Yemen Arab Republic. locality:
 Al Bayda Farekah. elevation: 1945m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.
- PI 540046 donor id: 4031. origin: Yemen Arab Republic. locality:
 Al Bayda Farekah. elevation: 1945m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seed
 yellow. Cultivated. Seed.
- PI 540047 donor id: 4036. origin: Yemen Arab Republic. locality:
 Al Bayda Farekah. elevation: 1945m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540048 donor id: 4039. origin: Yemen Arab Republic. locality:
 Al Bayda Mordum. elevation: 1945m. remarks: Race Durra kafir. Head type 4 semi-open, elongated,
 elliptical. Seed yellow. Cultivated. Seed.
- PI 540049 donor id: 4041. origin: Yemen Arab Republic. locality:
 Al Bayda Masydah. elevation: 1970m. remarks: Race Durra caudatum. Head type 4 semi-open, elongated,
 elliptical. Seed yellow. Cultivated. Seed.
- PI 540050 donor id: 4042. origin: Yemen Arab Republic. locality:
 Al Bayda Masydah. elevation: 1970m. remarks: Race Durra. Head type 4 semi-open, elongated, elliptical.
 Seed yellow. Cultivated. Seed.
- PI 540051 donor id: 4043. origin: Yemen Arab Republic. locality:
 Al Bayda Masydah. elevation: 1970m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seed orange. Cultivated. Seed.
- PI 540052 donor id: 4046. origin: Yemen Arab Republic. locality:
 Al Bayda Masydah. elevation: 1970m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seed yellow. Cultivated. Seed.

- PI 540053 donor id: 4048. origin: Yemen Arab Republic. locality:
 Al Bayda Masydah. elevation: 1970m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seed
 light yellow. Cultivated. Seed.
- PI 540054 donor id: 4052. origin: Yemen Arab Republic. locality:
 Al Bayda Mosrah Mosreahm. elevation: 1970m. remarks:
 Race Durra kafir. Head type 7 very compact, ovate,
 flattened base, with usually a recurved peduncle. Seed
 yellow. Cultivated. Seed.
- PI 540055 donor id: 4057. origin: Yemen Arab Republic. locality:
 Al Bayda Al Matrah. elevation: 1980m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.
- PI 540056 donor id: 4058. origin: Yemen Arab Republic. locality:
 Al Bayda Al Matrah. elevation: 1980m. remarks: Race Durra kafir. Head type 7 very compact, ovate, flattened
 base, with usually a recurved peduncle. Seed light
 yellow. Cultivated. Seed.
- PI 540057 donor id: 4060. origin: Yemen Arab Republic. locality:
 Al Bayda Al Matrah. elevation: 1980m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540058 donor id: 4061. origin: Yemen Arab Republic. locality:
 Al Bayda Al Matrah. elevation: 1980m. remarks: Race Durra. Head type 5 semi-compact, ovate. Seed light
 yellow. Cultivated. Seed.
- PI 540059 donor id: 4062. origin: Yemen Arab Republic. locality:
 Al Bayda Al Matrah. elevation: 1980m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540060 donor id: 4063. origin: Yemen Arab Republic. locality:
 Al Bayda Al Matrah. elevation: 1980m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seed light yellow. Cultivated. Seed.
- PI 540061 donor id: 4064. origin: Yemen Arab Republic. locality:
 Al Bayda Al Matrah. elevation: 1970m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540062 donor id: 4065. origin: Yemen Arab Republic. locality:
 Al Bayda Al Matrah. elevation: 1970m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical.
 Seed yellow. Cultivated. Seed.

- PI 540063 donor id: 4066. origin: Yemen Arab Republic. locality:
 Al Bayda Al Matrah. elevation: 1970m. remarks: Race Caudatum. Head type 4 semi-open, elongated, elliptical.
 Seed light orange. Cultivated. Seed.
- PI 540064 donor id: 4073. origin: Yemen Arab Republic. locality:
 Al Bayda Mashrapah. elevation: 2070m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seed
 light yellow. Cultivated. Seed.
- PI 540065 donor id: 4075. origin: Yemen Arab Republic. locality:
 Al Bayda Al Rathah. elevation: 2060m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base,
 with usually a recurved peduncle. Seed light yellow.
 Cultivated. Seed.
- PI 540066 donor id: 4076. origin: Yemen Arab Republic. locality:
 Al Bayda Al Rathah. elevation: 2060m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seed yellow. Cultivated. Seed.
- PI 540067 donor id: 4077. origin: Yemen Arab Republic. locality:
 Al Bayda Al Rathah. elevation: 2060m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seed yellow. Cultivated. Seed.
- PI 540068 donor id: 4078. origin: Yemen Arab Republic. locality:
 Al Bayda. elevation: 2060m. remarks: Race Caudatum
 durra. Head type 4 semi-open, elongated, elliptical.
 Seed yellow. Cultivated. Seed.
- PI 540069 donor id: 4080. origin: Yemen Arab Republic. locality:
 Al Bayda Al Roduh. elevation: 2060m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.
- PI 540070 donor id: 4081. origin: Yemen Arab Republic. locality:
 Al Bayda Al Rathah. elevation: 2060m. remarks: Race Durra caudatum. Head type 4 semi-open, elongated,
 elliptical. Seed yellow. Cultivated. Seed.
- PI 540071 donor id: 4083. origin: Yemen Arab Republic. locality:
 Al Bayda Al Rathah. elevation: 2060m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.
- PI 540072 donor id: 4086. origin: Yemen Arab Republic. locality:
 Al Bayda Al Rathah. elevation: 2060m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.

- PI 540073 donor id: 4087. origin: Yemen Arab Republic. locality:
 Al Bayda Al Rathah. elevation: 2060m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical.
 Seed light yellow. Cultivated. Seed.
- PI 540074 donor id: 4089. origin: Yemen Arab Republic. locality:
 Al Bayda Mathmakyn. elevation: 2060m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seed
 yellow. Cultivated. Seed.
- PI 540075 donor id: 4095. origin: Yemen Arab Republic. locality:
 Al Bayda Mathmakyn. elevation: 2060m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seed yellow. Cultivated. Seed.
- PI 540076 donor id: 4097. origin: Yemen Arab Republic. locality:
 Al Bayda Mathmakyn. elevation: 2060m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540077 donor id: 4101. origin: Yemen Arab Republic. locality:
 Al Bayda Mathmakyn. elevation: 2060m. remarks: Race Durra caudatum. Head type 7 very compact, ovate,
 flattened base, with usually a recurved peduncle. Seed
 yellow. Cultivated. Seed.
- PI 540078 donor id: 4106. origin: Yemen Arab Republic. locality:
 Al Bayda Mathmakyn. elevation: 2060m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.
- PI 540079 donor id: 4113. origin: Yemen Arab Republic. locality:
 Al Bayda Alkaah. elevation: 2080m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical.
 Seed yellow. Cultivated. Seed.
- PI 540080 donor id: 4125. origin: Yemen Arab Republic. locality:
 Al Bayda Alzaher. elevation: 2100m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540081 donor id: 4134. origin: Yemen Arab Republic. locality:
 Al Bayda Alzaher. elevation: 2100m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base,
 with usually a recurved peduncle. Seed yellow.
 Cultivated. Seed.
- PI 540082 donor id: 4157. origin: Yemen Arab Republic. locality:
 Al Bayda Alfwah. elevation: 2080m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical.
 Seed yellow. Cultivated. Seed.

- PI 540083 donor id: 4165. origin: Yemen Arab Republic. locality:
 Al Bayda Alzaher. elevation: 2090m. remarks: Race Durra caudatum. Head type 7 very compact, ovate,
 flattened base, with usually a recurved peduncle. Seed
 yellow. Cultivated. Seed.
- PI 540084 donor id: 4170. origin: Yemen Arab Republic. locality:
 Al Bayda Alfoah. elevation: 2080m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540085 donor id: 4172. origin: Yemen Arab Republic. locality:
 Al Bayda Alzaher. elevation: 2090m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 orange. Cultivated. Seed.
- PI 540086 donor id: 4177. origin: Yemen Arab Republic. locality:
 Al Bayda Al Matar. elevation: 2100m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540087 donor id: 4180. origin: Yemen Arab Republic. locality:
 Al Bayda Al Matar. elevation: 2100m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.
- PI 540088 donor id: 4183. origin: Yemen Arab Republic. locality:
 Al Bayda Beer Algarwy. elevation: 2050m. remarks: Race
 Caudatum durra. Head type 6 semi-compact, elliptical.
 Seed light yellow. Cultivated. Seed.
- PI 540089 donor id: 4188. origin: Yemen Arab Republic. locality:
 Al Bayda Al Matar. elevation: 2100m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical.
 Seed light yellow. Cultivated. Seed.
- PI 540090 donor id: 4189. origin: Yemen Arab Republic. locality:
 Al Bayda Al Matar. elevation: 2100m. remarks: Race Caudatum durra. Head type 5 semi-compact,ovate. Seed
 light yellow. Cultivated. Seed.
- PI 540091 donor id: 4199. origin: Yemen Arab Republic. locality:
 Al Bayda Alsharyah. elevation: 2070m. remarks: Race Durra caudatum. Head type 4 semi-open, elongated,
 elliptical. Seed yellow. Cultivated. Seed.
- PI 540092 donor id: 4209. origin: Yemen Arab Republic. locality:
 Al Bayda Awen. elevation: 2140m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seed yellow.
 Cultivated. Seed.

- PI 540093 donor id: 4214. origin: Yemen Arab Republic. locality:
 Al Bayda Al Matar. elevation: 2010m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.
- PI 540094 donor id: 4215. origin: Yemen Arab Republic. locality:
 Al Bayda Al Matar. elevation: 2010m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.
- PI 540095 donor id: 4220. origin: Yemen Arab Republic. locality:
 Al Bayda Awen. elevation: 2140m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 eliptical. Seed yellow. Cultivated. Seed.
- PI 540096 donor id: 4221. origin: Yemen Arab Republic. locality:
 Al Bayda Awen. elevation: 2140m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seed yellow.
 Cultivated. Seed.
- PI 540097 donor id: 4223. origin: Yemen Arab Republic. locality:
 Al Bayda Awen. elevation: 2140m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seed yellow.
 Cultivated. Seed.
- PI 540098 donor id: 4227. origin: Yemen Arab Republic. locality:
 Al Bayda Awen. elevation: 2140m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seed yellow.
 Cultivated. Seed.
- PI 540099 donor id: 4228. origin: Yemen Arab Republic. locality:
 Al Bayda Awen. elevation: 2140m. remarks: Race Durra
 caudatum. Head type 6 semi-compact, elliptical. Seed
 light yellow. Cultivated. Seed.
- PI 540100 donor id: 4235. origin: Yemen Arab Republic. locality:
 Al Bayda Awen. elevation: 2140m. remarks: Race Durra
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seed yellow. Cultivated. Seed.
- PI 540101 donor id: 4238. origin: Yemen Arab Republic. locality:
 Al Bayda Mathoken. elevation: 2090m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540102 donor id: 4239. origin: Yemen Arab Republic. locality:
 Al Bayda Mathoken. elevation: 2090m. remarks: Race Kafir durra. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.

- PI 540103 donor id: 4241. origin: Yemen Arab Republic. locality:
 Al Bayda Mathoken. elevation: 2090m. remarks: Race Caudatum durra. Head type 7 very compact, ovate,
 flattened base, with usually a recurved peduncle. Seed
 yellow. Cultivated. Seed.
- PI 540104 donor id: 4244. origin: Yemen Arab Republic. locality:
 Al Bayda Mathoken. elevation: 2090m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seed yellow. Cultivated. Seed.
- PI 540105 donor id: 4245. origin: Yemen Arab Republic. locality:
 Al Bayda Mathoken. elevation: 2090m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.
- PI 540106 donor id: 4248. origin: Yemen Arab Republic. locality:
 Al Bayda Mathoken. elevation: 2090m. remarks: Race Durra. Head type 4 semi-open, elongated, elliptical.
 Seed light yellow. Cultivated. Seed.
- PI 540107 donor id: 4249. origin: Yemen Arab Republic. locality:
 Al Bayda Mathoken. elevation: 2090m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540108 donor id: 4250. origin: Yemen Arab Republic. locality:
 Al Bayda Mathoken. elevation: 2090m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seed yellow. Cultivated. Seed.
- PI 540109 donor id: 4251. origin: Yemen Arab Republic. locality:
 Al Bayda Mathoken. elevation: 2090m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540110 donor id: 4254. origin: Yemen Arab Republic. locality:
 Al Bayda Mathoken. elevation: 2090m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540111 donor id: 4256. origin: Yemen Arab Republic. locality:
 Al Bayda Al Sharbah. elevation: 2070m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical.
 Seed red. Cultivated. Seed.
- PI 540112 donor id: 4257. origin: Yemen Arab Republic. locality:
 Al Bayda Al Sharbah. elevation: 2070m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical.
 Seed red. Cultivated. Seed.

- PI 540113 donor id: 4260. origin: Yemen Arab Republic. locality:
 Al Bayda Al Sharbah. elevation: 2070m. remarks: Race Kafir durra. Head type 4 semi-open, elongated,
 elliptical. Seed light yellow. Cultivated. Seed.
- PI 540114 donor id: 4266. origin: Yemen Arab Republic. locality:
 Al Bayda. elevation: 2010m. remarks: Race Durra
 kafir. Head type 4 semi-open, elongated, elliptical.
 Seed light yellow. Cultivated. Seed.
- PI 540115 donor id: 4269. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 1990m. remarks: Race Durra caudatum. Head type 4 semi-open, elongated,
 elliptical. Seed light yellow. Cultivated. Seed.
- PI 540116 donor id: 4272. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 1990m. remarks: Race Kafir durra. Head type 4 semi-open, elongated,
 elliptical. Seed light yellow. Cultivated. Seed.
- PI 540117 donor id: 4283. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 1940m. remarks: Race Kafir durra. Head type 4 semi-open, elongated,
 elliptical. Seed light yellow. Cultivated. Seed.
- PI 540118 donor id: 4284. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 1940m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540119 donor id: 4291. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 1940m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical.
 Seed light yellow. Cultivated. Seed.
- PI 540120 donor id: 4294. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 1940m. remarks: Race Durra caudatum. Head type 4 semi-open, elongated,
 elliptical. Seed light yellow. Cultivated. Seed.
- PI 540121 donor id: 4295. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 1940m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base,
 with usually a recurved peduncle. Seed light yellow.
 Cultivated. Seed.
- PI 540122 donor id: 4296. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 1940m. remarks: Race Durra. Head type 5 semi-compact, ovate. Seed light
 yellow. Cultivated. Seed.

- PI 540123 donor id: 4302. origin: Yemen Arab Republic. locality:
 Al Bayda Al Dakik. elevation: 1970m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seed light
 yellow. Cultivated. Seed.
- PI 540124 donor id: 4305. origin: Yemen Arab Republic. locality:
 Al Bayda Al Dakik. elevation: 1940m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.
- PI 540125 donor id: 4306. origin: Yemen Arab Republic. locality:
 Al Bayda. elevation: 1940m. remarks: Race Durra
 kafir. Head tupe 6 semi-compact, elliptical. Seed light
 yellow. Cultivated. Seed.
- PI 540126 donor id: 4324. origin: Yemen Arab Republic. locality:
 Al Bayda Al Masher. elevation: 2030m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seed light
 yellow. Cultivated. Seed.
- PI 540127 donor id: 4325. origin: Yemen Arab Republic. locality:
 Al Bayda Al Masher. elevation: 2030m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical.
 Seed light yellow. Cultivated. Seed.
- PI 540128 donor id: 4326. origin: Yemen Arab Republic. locality:
 Al Bayda Al Masher. elevation: 2030m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base,
 with usually a recurved peduncle. Seed light yellow.
 Cultivated. Seed.
- PI 540129 donor id: 4329. origin: Yemen Arab Republic. locality:
 Al Bayda Al Masher. elevation: 2030m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.
- PI 540130 donor id: 4331. origin: Yemen Arab Republic. locality:
 Al Bayda Al Tufah. elevation: 2000m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical.
 Seed light yellow. Cultivated. Seed.
- PI 540131 donor id: 4333. origin: Yemen Arab Republic. locality:
 Al Bayda Al Tufah. elevation: 2000m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540132 donor id: 4334. origin: Yemen Arab Republic. locality:
 Al Bayda Al Tufah. elevation: 2000m. remarks: Race Durra. Head type 5 semi-compact, ovate. Seed light
 yellow. Cultivated. Seed.

- PI 540133 donor id: 4340. origin: Yemen Arab Republic. locality:
 Al Bayda Al Tufah. elevation: 2000m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seed light
 yellow. Cultivated. Seed.
- PI 540134 donor id: 4345. origin: Yemen Arab Republic. locality:
 Al Bayda Al Redah. elevation: 2000m. remarks: Race Durra caudatum. Head type 4 semi-open, elongated,
 elliptical. Seed light yellow. Cultivated. Seed.
- PI 540135 donor id: 4363. origin: Yemen Arab Republic. locality:
 Al Bayda Afar. elevation: 2020m. remarks: Race Durra.
 Head type 6 semi-compact, elliptical. Seed yellow.
 Cultivated. Seed.
- PI 540136 donor id: 4368. origin: Yemen Arab Republic. locality:
 Al Bayda Afar. elevation: 2030m. remarks: Race Durra
 caudatum. Head type 6 semi-compact, elliptical. Seed
 light yellow. Cultivated. Seed.
- PI 540137 donor id: 4369. origin: Yemen Arab Republic. locality:
 Al Bayda Afar. elevation: 2030m. remarks: Race Durra
 caudatum. Head type 6 semi-compact, elliptical. Seed
 light yellow. Cultivated. Seed.
- PI 540138 donor id: 4372. origin: Yemen Arab Republic. locality:
 Al Bayda Sowadya. elevation: 2080m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seed light
 yellow. Cultivated. Seed.
- PI 540139 donor id: 4373. origin: Yemen Arab Republic. locality:
 Al Bayda Al Akar. elevation: 2030m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.
- PI 540140 donor id: 4375. origin: Yemen Arab Republic. locality:
 Al Bayda Sowadya. elevation: 2080m. remarks: Race Kafir durra. Head type 6 semi-compact, elliptical. Seed light yellow. Cultivated. Seed.
- PI 540141 donor id: 4386. origin: Yemen Arab Republic. locality:
 Gabal Oukal/Ibb. elevation: 2150m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical.
 Seed dark red. Cultivated. Seed.
- PI 540142 donor id: 4390. origin: Yemen Arab Republic. locality: Ibb. elevation: 1550m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seed yellow orange. Cultivated. Seed.

- PI 540143 donor id: 4392. origin: Yemen Arab Republic. locality: Ibb. elevation: 1550m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seed yellow orange. Cultivated. Seed.
- PI 540144 donor id: 4393. origin: Yemen Arab Republic. locality: Ibb. elevation: 1550m. remarks: Race Bicolor. Head type 4 semi-open, elongated, elliptical. Seed yellow white. Cultivated. Seed.
- PI 540145 donor id: 4395. origin: Yemen Arab Republic. locality: Ibb Sahul. elevation: 1450m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seed yellow orange. Cultivated. Seed.
- PI 540146 donor id: 4399. origin: Yemen Arab Republic. locality: Ibb Sahul. elevation: 1425m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical. Seed orange. Cultivated. Seed.
- PI 540147 donor id: 4400. origin: Yemen Arab Republic. locality: Suk Al-Sabt. elevation: 1450m. remarks: Race Durra caudatum. Head type 5 semi-compact,ovate. Seed yellow orange. Cultivated. Seed.
- PI 540148 donor id: 4403. origin: Yemen Arab Republic. locality:
 Suk Al-Sabt. elevation: 1450m. remarks: Race Caudatum
 durra. Head type 5 semi-compact,ovate. Seed light
 yellow. Cultivated. Seed.
- PI 540149 donor id: 4406. origin: Yemen Arab Republic. locality:
 Suk Al-Sabt. elevation: 1450m. remarks: Race Caudatum
 durra. Head type 4 semi-open, elongated, elliptical.
 Seed light yellow. Cultivated. Seed.
- PI 540150 donor id: 4407A. origin: Yemen Arab Republic. locality: Suk Al-Sabt. elevation: 1450m. remarks: Race Bicolor. Head type 3 open, elongated, elliptical. Seed light yellow. Cultivated. Seed.
- PI 540151 donor id: 4407B. origin: Yemen Arab Republic. locality:
 Suk Al-Sabt. elevation: 1450m. remarks: Race Durra
 kafir. Head type 4 semi-open, elongated, elliptical.
 Seed light yellow. Cultivated. Seed.
- PI 540152 donor id: 4408. origin: Yemen Arab Republic. locality: Suk Al-Sabt. elevation: 1450m. remarks: Race Kafir caudatum. Head type 5 semi-compact, ovate. Seed light orange. Cultivated. Seed.

- PI 540153 donor id: 4411. origin: Yemen Arab Republic. locality: Ibb Sowek. elevation: 1450m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seed light orange. Cultivated. Seed.
- PI 540154 donor id: 4415. origin: Yemen Arab Republic. locality:
 Ibb Dalil. elevation: 1540m. remarks: Race Durra
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seed dark orange. Cultivated. Seed.
- PI 540155 donor id: 4417. origin: Yemen Arab Republic. locality:
 Dalil Sumara. elevation: 1680m. remarks: Race Durra
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seed light yellow. Cultivated. Seed.
- PI 540156 donor id: 4419. origin: Yemen Arab Republic. locality: Ibb Dalil. elevation: 1540m. remarks: Race Durra. Head type 5 semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 540157 donor id: 4420. origin: Yemen Arab Republic. locality: Ibb Dalil. elevation: 1550m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seed light yellow. Cultivated. Seed.
- PI 540158 donor id: 4421. origin: Yemen Arab Republic. locality: Ibb Dalil. elevation: 1550m. remarks: Race Durra caudatum. Head type 4 semi-open, elongated, elliptical. Seed yellow. Cultivated. Seed.
- PI 540159 donor id: 4422. origin: Yemen Arab Republic. locality:
 Dalil Sumara. elevation: 1680m. remarks: Race Durra
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seed yellow. Cultivated. Seed.
- PI 540160 donor id: 4427. origin: Yemen Arab Republic. locality:
 Dalil Sumara. elevation: 1680m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seed yellow.
 Cultivated. Seed.
- PI 540161 donor id: 4428. origin: Yemen Arab Republic. locality: Ibb Dalil. elevation: 1550m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical. Seed orange. Cultivated. Seed.
- PI 540162 donor id: 4429. origin: Yemen Arab Republic. locality: Ibb Dalil. elevation: 1650m. remarks: Race Durra caudatum. Head type 4 semi-open, elongated, elliptical. Seed yellow. Cultivated. Seed.

- PI 540163 donor id: 4430. origin: Yemen Arab Republic. locality:
 Dalil Sumara. elevation: 1680m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seed light
 yellow. Cultivated. Seed.
- PI 540164 donor id: 4431. origin: Yemen Arab Republic. locality: Ibb Dalil. elevation: 1650m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 540165 donor id: 4432. origin: Yemen Arab Republic. locality:
 Ibb Sumara. elevation: 2450m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seed yellow.
 Cultivated. Seed.
- PI 540166 donor id: 4433. origin: Yemen Arab Republic. locality:
 Ibb Sumara. elevation: 2250m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seed yellow.
 Cultivated. Seed.
- PI 540167 donor id: 4434. origin: Yemen Arab Republic. locality:
 Ibb Sumara. elevation: 2450m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seed yellow.
 Cultivated. Seed.
- PI 540168 donor id: 4435. origin: Yemen Arab Republic. locality:
 Gabal Oukal. elevation: 2150m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seed yellow.
 Cultivated. Seed.
- PI 540169 donor id: 4437. origin: Yemen Arab Republic. locality: Ibb Sumara. elevation: 2450m. remarks: Race Durra. Head type 7 very compact, elongated, elliptical. Seed light brown. Cultivated. Seed.
- PI 540170 donor id: 4440. origin: Yemen Arab Republic. locality:
 Dar Habab Sumara. elevation: 2250m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seed
 yellow. Cultivated. Seed.
- PI 540171 donor id: 4442. origin: Yemen Arab Republic. locality:
 Suk Al-Sabt. elevation: 1450m. remarks: Race Caudatum
 durra. Head type 4 semi-open, elongated, elliptical.
 Seed orange. Cultivated. Seed.
- PI 540172 donor id: 4443. origin: Yemen Arab Republic. locality: Gabal Oukal. elevation: 2150m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seed tan. Cultivated. Seed.

PI 539940 to 540252-continued

- PI 540173 donor id: 4445. origin: Yemen Arab Republic. locality:
 Jiharib Sumara. elevation: 1980m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seed light
 yellow. Cultivated. Seed.
- PI 540174 donor id: 4446. origin: Yemen Arab Republic. locality: Sahul Ibb. elevation: 1425m. remarks: Race Bicolor. Head type 3 open, elongated, elliptical. Seed light yellow. Cultivated. Seed.
- PI 540175 donor id: 4451. origin: Yemen Arab Republic. locality:
 Damar Radia Abass. elevation: 2110m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540176 donor id: 4452. origin: Yemen Arab Republic. locality: Ibb Farm. elevation: 1850m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated, elliptical. Seed light red. Cultivated. Seed.
- PI 540177 donor id: 4454. origin: Yemen Arab Republic. locality:
 Damar Radia Abass. elevation: 2190m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seed light
 yellow. Cultivated. Seed.
- PI 540178 donor id: 4456. origin: Yemen Arab Republic. locality:
 Al Bayda Awayan. elevation: 2140m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical.
 Seed yellow. Cultivated. Seed.
- PI 540179 donor id: 4457. origin: Yemen Arab Republic. locality:
 Al Bayda Awayan. elevation: 2140m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seed
 yellow. Cultivated. Seed.
- PI 540180 donor id: 4459. origin: Yemen Arab Republic. locality:
 Al Bayda Awayan. elevation: 2140m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical.
 Seed light red. Cultivated. Seed.
- PI 540181 donor id: 4460. origin: Yemen Arab Republic. locality:
 Al Bayda Al Haykal. elevation: 2140m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 light yellow. Cultivated. Seed.
- PI 540182 donor id: 4461. origin: Yemen Arab Republic. locality:
 Al Bayda Al Haykal. elevation: 2140m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seed
 red. Cultivated. Seed.

- PI 540183 donor id: 4462. origin: Yemen Arab Republic. locality:
 Al Bayda Al Haykal. elevation: 2140m. remarks: Race Caudatum durra. Head type 7 very compact, ovate,
 flattened base, with usually a recurved peduncle. Seed
 red. Cultivated. Seed.
- PI 540184 donor id: 4463. origin: Yemen Arab Republic. locality:
 Al Bayda Al Haykal. elevation: 2140m. remarks: Race Caudatum durra. Head type 7 very compact, ovate,
 flattened base, with usually a recurved peduncle. Seed
 light red. Cultivated. Seed.
- PI 540185 donor id: 4471. origin: Yemen Arab Republic. locality:
 Al Habik. elevation: 210m. remarks: Race Durra. Head
 type 5 semi-compact, ovate. Seed light yellow.
 Cultivated. Seed.
- PI 540186 donor id: 4472. origin: Yemen Arab Republic. locality:
 Al Galah. elevation: 210m. remarks: Race Caudatum
 durra. Head type 4 semi-open, elongated, elliptical.
 Seed red and white. Cultivated. Seed.
- PI 540187 donor id: 4475. origin: Yemen Arab Republic. locality:
 Al Sarrah. elevation: 185m. remarks: Race Caudatum.
 Head type 4 semi-open, elongated, elliptical. Seed
 light red. Cultivated. Seed.
- PI 540188 donor id: 4476. origin: Yemen Arab Republic. locality:
 Bakle Al Dehly. elevation: 194m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seed light red. Cultivated. Seed.
- PI 540189 donor id: 4477. origin: Yemen Arab Republic. locality:
 Khober. elevation: 220m. remarks: Race Caudatum
 durra. Head type 4 semi-open, elongated, elliptical.
 Seed light red. Cultivated. Seed.
- PI 540190 donor id: 4478. origin: Yemen Arab Republic. locality:
 Kohre. elevation: 190m. remarks: Race Caudatum durra.
 Head type 4 semi-open, elongated, elliptical. Seed
 light red. Cultivated. Seed.
- PI 540191 donor id: 4479. origin: Yemen Arab Republic. locality:
 Mahal Alotome. elevation: 580m. remarks: Race Caudatum. Head type 6 semi-compact, elliptical. Seed
 light brown. Cultivated. Seed.
- PI 540192 donor id: 4480. origin: Yemen Arab Republic. locality:
 Altig Mahwit. elevation: 730m. remarks: Race Caudatum
 durra. Head type 4 semi-open, elongated, elliptical.
 Seed white and light red. Cultivated. Seed.

- PI 540193 donor id: 4481. origin: Yemen Arab Republic. locality:
 Al Jomah. elevation: 780m. remarks: Race Caudatum
 durra. Head type 4 semi-open, elongated, elliptical.
 Seed white. Cultivated. Seed.
- PI 540194 donor id: 4483. origin: Yemen Arab Republic. locality:
 Almahwit Al Wostah. elevation: 800m. remarks: Race Durra caudatum. Head type 7 very compact, ovate,
 flattened base, with usually a recurved peduncle. Seed
 red. Cultivated. Seed.
- PI 540195 donor id: 4484. origin: Yemen Arab Republic. locality:
 Almahwit Al Maharebah. elevation: 840m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seed light red. Cultivated. Seed.
- PI 540196 donor id: 4486. origin: Yemen Arab Republic. locality:
 Almahwit Al Kata's. elevation: 880m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated,
 elliptical. Seed tan. Cultivated. Seed.
- PI 540197 donor id: 4487. origin: Yemen Arab Republic. locality:
 Almahwit Al Arkoob. elevation: 1345m. remarks: Race Caudatum bicolor. Head type 3 open, elongated,
 elliptical. Seed light yellow. Cultivated. Seed.
- PI 540198 donor id: 4488. origin: Yemen Arab Republic. locality:
 Al Arkoob. elevation: 1345m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seed light
 red. Cultivated. Seed.
- PI 540199 donor id: 4491. origin: Yemen Arab Republic. locality:
 Al Balad. elevation: 1355m. remarks: Race Caudatum
 durra. Head type 4 semi-open, elongated, elliptical.
 Seed yellow tan. Cultivated. Seed.
- PI 540200 donor id: 4492. origin: Yemen Arab Republic. locality:
 Al Arkoob. elevation: 1360m. remarks: Race Caudatum
 durra. Head type 4 semi-open, elongated, elliptical.
 Seed white. Cultivated. Seed.
- PI 540201 donor id: 4493. origin: Yemen Arab Republic. locality:
 Bayt Abdo Ali. elevation: 1180m. remarks: Race Durra
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seed red and white. Cultivated. Seed.
- PI 540202 donor id: 4494. origin: Yemen Arab Republic. locality:
 Damar. elevation: 1480m. remarks: Race Durra
 caudatum. Head type 7 very compact, ovate, flattened
 base, with usually a recurved peduncle. Seed brown.
 Cultivated. Seed.

- PI 540203 donor id: 4496. origin: Yemen Arab Republic. remarks:
 Race Caudatum durra. Head type 6 semi-compact,
 elliptical. Seed brown. Cultivated. Seed.
- PI 540204 donor id: 4497. origin: Yemen Arab Republic. locality:
 Damar Al Fikah. elevation: 2300m. remarks: Race Durra
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seed yellow. Cultivated. Seed.
- PI 540205 donor id: 4500. origin: Yemen Arab Republic. locality:
 Al Bayda Al Swadyah. elevation: 2125m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seed
 yellow. Cultivated. Seed.
- PI 540206 donor id: 4501. origin: Yemen Arab Republic. locality:
 Al Bayda Thenaem. elevation: 2030m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seed
 yellow. Cultivated. Seed.
- PI 540207 donor id: 4507. origin: Yemen Arab Republic. locality:
 Al Bayda Awen. elevation: 2140m. remarks: Race Durra
 kafir. Head type 5 semi-compact, ovate. Seed yellow.
 Cultivated. Seed.
- PI 540208 donor id: 4518. origin: Yemen Arab Republic. locality:
 Al Bayda Al Sowadya. elevation: 2080m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical.
 Seed yellow. Cultivated. Seed.
- PI 540209 donor id: 4525. origin: Yemen Arab Republic. locality:
 Office Collection. remarks: Race Caudatum durra. Head
 type 6 semi-compact, elliptical. Seed red. Cultivated.
 Seed.
- PI 540210 donor id: 4526. origin: Yemen Arab Republic. locality:
 Office Collection. remarks: Race Caudatum durra. Head
 type 5 semi-compact, ovate. Seed red. Cultivated.
 Seed.
- PI 540211 donor id: 4527. origin: Yemen Arab Republic. locality:
 Office Collection. remarks: Race Kafir durra. Head
 type 4 semi-open, elongated, elliptical. Seed yellow.
 Cultivated. Seed.
- PI 540212 donor id: 4529. origin: Yemen Arab Republic. locality:
 Office Collection. remarks: Race Caudatum. Head type 4
 semi-open, elongated, elliptical. Seed white.
 Cultivated. Seed.

- PI 540213 donor id: 4531. origin: Yemen Arab Republic. locality:
 Office Collection. remarks: Race Caudatum durra. Head
 type 4 semi-open, elongated, elliptical. Seed red.
 Cultivated. Seed.
- PI 540214 donor id: 4532. origin: Yemen Arab Republic. locality:
 Office Collection. remarks: Race Caudatum durra. Head
 type 4 semi-open, elongated, elliptical. Seed dark red.
 Cultivated. Seed.
- PI 540215 donor id: 4534. origin: Yemen Arab Republic. locality:
 Office Collection. remarks: Race Durra kafir. Head
 type 5 semi-compact, ovate. Seed yellow. Cultivated.
 Seed.
- PI 540216 donor id: 4535. origin: Yemen Arab Republic. locality:
 Office Collection. remarks: Race Kafir caudatum. Head
 type 4 semi-open, elongated, elliptical. Seed light
 brown. Cultivated. Seed.
- PI 540217 donor id: 4536. origin: Yemen Arab Republic. locality:
 Office Collection. remarks: Race Durra caudatum. Head
 type 4 semi-open, elongated, elliptical. Seed yellow.
 Cultivated. Seed.
- PI 540218 donor id: 4537. origin: Yemen Arab Republic. locality:
 Office Collection. remarks: Race Caudatum durra. Head
 type 4 semi-open, elongated, elliptical. Seed light
 red. Cultivated. Seed.
- PI 540219 donor id: 4538. origin: Yemen Arab Republic. locality:
 Office Collection. remarks: Race Caudatum durra. Head
 type 4 semi-open, elongated, elliptical. Seed light
 red. Cultivated. Seed.
- PI 540220 donor id: 4539. origin: Yemen Arab Republic. locality:
 Office Collection. remarks: Race Durra caudatum. Head
 type 7 very compact, ovate, flattened base, with
 usually a recurved peduncle. Seed red. Cultivated.
 Seed.
- PI 540221 donor id: 4540. origin: Yemen Arab Republic. locality:
 Office Collection. remarks: Race Durra caudatum. Head
 type 6 semi-compact, elliptical. Seed red. Cultivated.
 Seed.
- PI 540222 donor id: 4542. origin: Yemen Arab Republic. locality:
 Maymoon. elevation: 2288m. remarks: Race Durra. Head
 type 7 very compact, ovate, flattened base, with
 usually a recurved peduncle. Seed white. Cultivated.
 Seed.

- PI 540223 donor id: 4544. origin: Yemen Arab Republic. locality:
 Sunhan. elevation: 2486m. remarks: Race Durra. Head
 type 7 very compact, ovate, flattened base, with
 usually a recurved peduncle. Seed light brown.
 Cultivated. Seed.
- PI 540224 donor id: 4549. origin: Yemen Arab Republic. locality: Wadi Khaywan. elevation: 1690m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seed white. Cultivated. Seed.
- PI 540225 donor id: 4551. origin: Yemen Arab Republic. locality:
 Raydah. elevation: 2188m. remarks: Race Durra. Head
 type 6 semi-compact, elliptical. Seed white.
 Cultivated. Seed.
- PI 540226 donor id: 4552. origin: Yemen Arab Republic. locality: Wadi Nashor. elevation: 2182m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seed light yellow. Cultivated. Seed.
- PI 540227 donor id: 4553. origin: Yemen Arab Republic. locality:
 Al Asha. elevation: 1193m. remarks: Race Durra
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seed red. Cultivated. Seed.
- PI 540228 donor id: 4554. origin: Yemen Arab Republic. locality:
 Al Asha. elevation: 1193m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seed light
 red. Cultivated. Seed.
- PI 540229 donor id: 4555. origin: Yemen Arab Republic. locality:
 Al Asha. elevation: 1193m. remarks: Race Durra
 caudatum. Head type 6 semi-compact, elliptical. Seed
 dark red. Cultivated. Seed.
- PI 540230 donor id: 4557. origin: Yemen Arab Republic. locality:
 Al Asha. elevation: 1193m. remarks: Race Caudatum
 durra. Head type 5 semi-compact, ovate. Seed white.
 Cultivated. Seed.
- PI 540231 donor id: 4559. origin: Yemen Arab Republic. locality:
 Wadi Khaywan. elevation: 1690m. remarks: Race Durra.
 Head type 7 very compact, ovate, flattened base, with
 usually a recurved peduncle. Seed light yellow.
 Cultivated. Seed.
- PI 540232 donor id: 4562. origin: Yemen Arab Republic. locality: Wadi Khaywan. elevation: 1690m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated, elliptical. Seed yellow. Cultivated. Seed.

PI 539940 to 540252-continued

- PI 540233 donor id: 4563. origin: Yemen Arab Republic. locality: Wadi Warwar. elevation: 2486m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seed white. Cultivated. Seed.
- PI 540234 donor id: 4564. origin: Yemen Arab Republic. locality:
 Mafdan. elevation: 2892m. remarks: Race Durra. Head
 type 7 very compact, ovate, flattened base, with
 usually a recurved peduncle. Seed brown. Cultivated.
 Seed.
- PI 540235 donor id: 4565. origin: Yemen Arab Republic. locality: Yazle. elevation: 2915m. remarks: Race Durra caudatum. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seed brown. Cultivated. Seed.
- PI 540236 donor id: 4568. origin: Yemen Arab Republic. locality:
 Mahwit. elevation: 1800m. remarks: Race Durra
 caudatum. Head type 7 very compact, ovate, flattened
 base, with usually a recurved peduncle. Seed red.
 Cultivated. Seed.
- PI 540237 donor id: 4569. origin: Yemen Arab Republic. locality:
 Mahwit. elevation: 1800m. remarks: Race Durra kafir.
 Head type 4 semi-open, elongated, elliptical. Seed
 yellow. Cultivated. Seed.
- PI 540238 donor id: 4571. origin: Yemen Arab Republic. locality: Ibb-Daliel Otuma. elevation: 2400m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated elliptical. Seed orange. Cultivated. Seed.
- PI 540239 donor id: 4572. origin: Yemen Arab Republic. locality: Ibb-Daliel Otuma. elevation: 2400m. remarks: Race Caudatum kafir. Head type 4 semi-open, elongated elliptical. Seed light yellow. Cultivated. Seed.
- PI 540240 donor id: 4573. origin: Yemen Arab Republic. locality: Mahwit. elevation: 1800m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical. Seed light red. Cultivated. Seed.
- PI 540241 donor id: 4577. origin: Yemen Arab Republic. locality:
 Ibb-Daliel Otuma. elevation: 2400m. remarks: Race Durra kafir. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seed yellow orange. Cultivated. Seed.

- PI 540242 donor id: 4578. origin: Yemen Arab Republic. locality:
 Mahwit. elevation: 1800m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seed light
 yellow. Cultivated. Seed.
- PI 540243 donor id: 4579. origin: Yemen Arab Republic. locality:
 Mahwit. elevation: 1800m. remarks: Race Durra
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seed orange. Cultivated. Seed.
- PI 540244 donor id: 4580. origin: Yemen Arab Republic. locality:
 Mahwit. elevation: 1800m. remarks: Race Caudatum
 bicolor. Head type 4 semi-open, elongated, elliptical.
 Seed white. Cultivated. Seed.
- PI 540245 donor id: 4581. origin: Yemen Arab Republic. locality:
 Mahwit. elevation: 1800m. remarks: Race Durra
 caudatum. Head type 6 semi-compact, elliptical. Seed
 red. Cultivated. Seed.
- PI 540246 donor id: 4582. origin: Yemen Arab Republic. locality:
 Mahwit. elevation: 1800m. remarks: Race Caudatum.
 Head type 4 semi-open, elongated, elliptical. Seed
 white. Cultivated. Seed.
- PI 540247 donor id: 4585. origin: Yemen Arab Republic. locality:
 Al Ahjar. elevation: 2590m. remarks: Race Durra
 kafir. Head type 6 semi-compact, elliptical. Seed
 yellow orange. Cultivated. Seed.
- PI 540248 donor id: 4586. origin: Yemen Arab Republic. locality:
 Al Ahjar. elevation: 2590m. remarks: Race Durra
 caudatum. Head type 5 semi-compact, ovate. Seed light
 yellow. Cultivated. Seed.
- PI 540249 donor id: 4587. origin: Yemen Arab Republic. locality:
 Al Ahjar. elevation: 2590m. remarks: Race Durra. Head
 type 5 semi-compact, ovate. Seed red. Cultivated.
 Seed.
- PI 540250 donor id: 4588. origin: Yemen Arab Republic. locality:
 Al Ahjar. elevation: 2590m. remarks: Race Durra
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seed yellow orange. Cultivated. Seed.
- PI 540251 donor id: 4589. origin: Yemen Arab Republic. locality:
 Al Ahjar. elevation: 2590m. remarks: Race Caudatum
 durra. Head type 6 semi-compact, elliptical. Seed light
 yellow. Cultivated. Seed.

- PI 539940 to 540252-continued
 - PI 540252 donor id: 4590. origin: Yemen Arab Republic. locality:
 Al Ahjar. elevation: 2590m. remarks: Race Durra
 caudatum. Head type 4 semi-open, elongated, elliptical.
 Seed light yellow. Cultivated. Seed.
- PI 540253. X Triticosecale sp. POACEAE Triticale

Donated by: McLeod, J.G., Swift Current Res. Sta.-Agric. Canada, P.O. Box 1030, Swift Current, Saskatchewan, Canada. remarks: Frank Triticale. Received April 20, 1990.

origin: Canada. origin institute: Agriculture Canada, Research Station, Research Branch, Swift Current, Saskatchewan, Saskatchewan. cultivar: FRANK. pedigree: 7634-246E3/7631-CJ. other id: T59. other id: 7937-CA3A. other id: CV-9. group: CSR-TRITICALE. remarks: Spike long, middense, semi-nodding, awned, tapered. Glumes medium width, long, pubescent, white with glume shoulders apiculate and narrow and glume beaks narrow and acuminate. Kernel red, medium hardness, ovate with rounded checks. Kernel brush midsize, midlong hairs, and crease wide and of medium depth. Germ large. Resistant to prevalent races of stem rust (Puccinia graminis), leaf rust (P. recondita),. Spring Annual. Cultivar. Seed.

PI 540254 to 540256. Gossypium hirsutum L. MALVACEAE Upland cotton

Donated by: Smith, C.W., Texas Agr. Exp. Sta., Texas A&M University, Dept. of Soil & Crop Sciences, College Station, Texas, United States. remarks: Three Early-Maturing Upland Cotton Germplasms. Received April 12, 1990.

PI 540254 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 1051. pedigree: CA-491A/Lankart 57/3/Empire/Lankart 611/2/Empire/Lankart 611 /4/Paymaster 1209/2/Lankart 57/Acala 5675/3/Paymaster 1209/2 /Lankart 57/Acala 5675/3/Paymaster 1209/2 /Lankart 57/Acala 5675/3/Lankart 57/2/Deltapine 14/Roger's Acala. other id: GP-422. source: Crop Sci. 30(6):1372 1990. group: CSR-COTTON. remarks: Plants compact type, agronomically determinate. Maturity early. Bolls medium. Storm resistant. Perennial. Breeding Material. Seed.

- PI 540255 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 0155. pedigree: CA 491A/Lankart 57/2/Empire Sel./5/AE 179/T-501/2/Deltapine 14/Roger's Acala/3/Paymaster 1209/4/Lankart 57 Sel./Acala 5675. other id: GP-423. source: Crop Sci. 30(6):1372 1990. group: CSR-COTTON. remarks: Plants compact type, agronomically determinate. Maturity early. Bolls medium to large. Storm resistant. Perennial. Breeding Material. Seed.
- PI 540256 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 1062. pedigree: A high strength line of unknown origina/Tamcot SP-21S/2/ Arkugo 4 sel. other id: GP-424. source: Crop Sci. 30(6):1372 1990. group: CSR-COTTON. remarks: Plants compact type, agronomically determinate. Maturity early. Bolls medium to large. Storm resistant. High fiber bundle strength. Perennial. Breeding Material. Seed.
- PI 540257 to 540263. Gossypium hirsutum L. MALVACEAE Upland cotton

Donated by: Smith, C.W., Texas Agr. Exp. Sta., Texas A&M University, Dept. of Soil & Crop Sciences, College Station, Texas, United States. remarks: Seven Upland Cotton Germplasms for South Texas Texas. Received April 12, 1990.

- PI 540257 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 8165. pedigree: PD 6520/5/Lankart 57/2/Deltapine 14/Roger's Acala/3/Lankart 3840/4/DSR6-19. other id: GP-425. source: Crop Sci. 30(6):1373 1990. group: CSR-COTTON. remarks: Plants compact type, agronomically determinate. Maturity early. Bolls medium to large. Storm resistant. Perennial. Breeding Material. Seed.
- PI 540258 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 9163. pedigree: North Carolina Smooth 2/2/AE 179/Tideland 69/3/Paymaster/4/ Lankart 57/5/Lankart 57/2/Deltapine 14/Roger's Acala/3/ Lankart 3840/4/DSR6-19. other id: GP-426. source: Crop Sci. 30(6):1373 1990. group: CSR-COTTON. remarks: Plants compact type, agronomically determinate. Maturity early. Bolls large. Storm resistant. Perennial. Breeding Material. Seed.

- PI 540259 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 73840. pedigree: Lankart 57/2/Deltapine 14/Roger's Acala/3/Lankart 3840/4/ DSR6-19/5/Gregg/Fox 4/2/Lankart 57/Acala 5675. other id: GP-427. source: Crop Sci. 30(6):1373 1990. group: CSR-COTTON. remarks: Plants compact type, agronomically determinate. Maturity early. Bolls large. Storm resistant. Perennial. Breeding Material. Seed.
- PI 540260 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 0033. pedigree: Tamcot SP21 S/2/CA 491A/Lankart 57/3/6M-10/4/Paymaster 1209/ DSR6-19/3/Deltapine 14/Roger's Acala/2/Lankart 57. other id: GP-428. source: Crop Sci. 30(6):1373 1990. group: CSR-COTTON. remarks: Plants compact type, agronomically determinate. Maturity early. Bolls medium to large. Storm resistant. Perennial. Breeding Material. Seed.
- PI 540261 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 8177. pedigree: PD 8619/4/Lankart 57/2/Deltapine 14/Roger's Acala/3/DSR6-19. other id: GP-429. source: Crop Sci. 30(6):1373 1990. group: CSR-COTTON. remarks: Plants compact type, agronomically determinate. Maturity early. Bolls medium to large. Storm resistant. Petal spot. Perennial. Breeding Material. Seed.
- PI 540262 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 0066. pedigree: New Mexico 1073-30/407-20/3/Paymaster 1209/DSR6-19/2/Tamcot CAMD-El. other id: GP-430. source: Crop Sci. 30(6):1373 1990. group: CSR-COTTON. remarks: Plants compact type, agronomically determinate. Maturity early. Bolls medium to large. Nectariless. Storm resistant. Perennial. Breeding Material. Seed.

PI 540263 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 1033. pedigree: AE-179/T 501/2/Deltapine 14/Roger's Acala/3/Paymaster 1209/ DSR6-19/6/Lankart 57/2/Deltapine 14/Roger's Acala/3/Lankart 3840/4/DSR6-19/5/Gregg/Fox 4/2/Lankart 57/Acala 5675. other id: GP-431. source: Crop Sci. 30(6):1373 1990. group: CSR-COTTON. remarks: Plants semi-dwarf type, agronomically determinate. Maturity early. Bolls large. Storm resistant. Perennial. Breeding Material. Seed.

PI 540264 to 540273. Gossypium hirsutum L. MALVACEAE Upland cotton

Donated by: Smith, C.W., Texas Agr. Exp. Sta., Texas A&M University, Dept. of Soil & Crop Sciences, College Station, Texas, United States. remarks: Ten Upland Cotton Germplasms with Improved Fiber Quality. Received April 12, 1990.

- PI 540264 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 1025. pedigree: PD 6520/4/AE-179/T501/2/Deltapine 14/Roger's Acala/3/ Paymaster 1209/DSR6-19. other id: GP-432. source: Crop Sci. 30(6):1373 1990. group: CSR-COTTON. remarks: Plants compact type, agronomically determinate. Maturity early. Bolls medium to large. Average storm resistance. 28.2 grams/tex fiber bundle strength. 1.15 inch upper half mean length fibers. Perennial. Breeding Material. Seed.
- PI 540265 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 1057. pedigree: A high strength line of unknown origin/5/Paymaster 1209/DSR6 -19/3/Lankart 57/2/Deltapine 14/Roger's Acala/4/Lankart 3840. other id: GP-433. source: Crop Sci. 30(6):1373 1990. group: CSR-COTTON. remarks: Plants compact type, agronomically determinate. Maturity early. Bolls medium. Storm resistant. 1.20 inch upper half mean fiber length. 32.2 grams/tex fiber bundle strength. Perennial. Breeding Material. Seed.

- PI 540266 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 1074. pedigree: A high strength line of unknown origin/PD 9232. other id: GP-434. source: Crop Sci. 30(6):1373 1990. group: CSR-COTTON. remarks: Plants compact type, agronomically determinate. Maturity early. Bolls medium to large. Storm resistant. 1.12 inch upper half mean fiber length. 31.5 grams/tex fiber bundle strength. Perennial. Breeding Material. Seed.
- PI 540267 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 1080. pedigree: A high fiber strength line of unknown origin/4/Tamcot SP-21S /3/CA491A/Lankart 57/2/6m-10. other id: GP-435. source: Crop Sci. 30(6):1373 1990. group: CSR-COTTON. remarks: Plants compact type, agronomically determinate. Maturity early. Bolls large. 1.20 inch uppper half mean length fibers. 31.2grams/tex fiber bundle strength. Perennial. Breeding Material. Seed.
- PI 540268 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 2008. pedigree: Lankart 57/2/Deltapine 14/Roger's Acala/3/L 3840/4/FJA 347/Lankart 57/2/Deltapine 14/Roger's Acala/3/Lankart 3840. other id: GP-436. source: Crop Sci. 30(6):1373 1990. group: CSR-COTTON. remarks: Plants compact type, agronomically determinate. Maturity medium. Bolls medium to large. Storm resistant. 1.12 inch upper half mean fiber length. 29.0 grams/tex fiber bundle strength. Perennial. Breeding Material. Seed.
- PI 540269 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 2055. pedigree: AE-179/T501/2/Deltapine 14/3/Roger's Acala/4/Paymaster 1209 /DSR6-19/5/PD 6992. other id: GP-437. source: Crop Sci. 30(6):1373 1990. group: CSR-COTTON. remarks: Plants compact type, agronomically determinate. Maturity early. Bolls medium to large. Storm resistant. 1.11 inch upper half mean fiber length. 30.0 grams/tex fiber bundle strength. Perennial. Breeding Material. Seed.

- PI 540270 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 2073. pedigree: FJA 347/4/Lankart 57/2/Daltapine 14/Roger's Acala/3/Lankart 3840/5/PD 9363. other id: GP-438. source: Crop Sci. 30(6):1373 1990. group: CSR-COTTON. remarks: Plants compact type, agronomically determinate. Maturity early. Bolls medium. Storm resistant. 1.13 inch upper half mean fiber length. 29.0 grams/tex fiber bundle strength. Perennial. Breeding Material. Seed.
- PI 540271 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 2111. pedigree: PD 6142/A high strength line of unknown origin. other id: GP-439. source: Crop Sci. 30(6):1373 1990. group: CSR-COTTON. remarks: Plants compact type, agronomically determinate. Maturity early. Bolls medium to large. Storm resistant. 1.15 inch upper half mean fiber length. 30.0 grams/tex fiber bundle strength. Perennial. Breeding Material. Seed.
- PI 540272 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 2112. pedigree: PD 6142/A high strength line of unknown origin. other id: GP-440. source: Crop Sci. 30(6):1373 1990. group: CSR-COTTON. remarks: Plants compact type, agronomically determinate. Bolls medium. Storm resistant. 1.07 inch upper half mean fiber length. 30.0 grams/tex fiber bundle strength. Perennial. Breeding Material. Seed.
- PI 540273 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 2126. pedigree: PD 6992/5/DES Anom 16/4/DSR6-19/CA998/3/DSR6-19/2/DSR6-19/ CA998. other id: GP-441. source: Crop Sci. 30(6):1373 1990. group: CSR-COTTON. remarks: Plants compact type, agronomically determinate. Maturity early. Bolls medium. Storm resistant. 1.16 inch upper half mean fiber length. 28.2 grams/tex fiber bundle strength. Perennial. Breeding Material. Seed.
- PI 540274 to 540284. Gossypium hirsutum L. MALVACEAE Upland cotton

Donated by: Smith, C.W., Texas Agr. Exp. Sta., Texas A&M University, Dept. of Soil & Crop Sciences, College Station, Texas, United States. remarks: Eleven High Tannin Upland Cotton Germplasms Condensed Tannins. Received April 12, 1990.

- PI 540274 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86CC-7. pedigree: Recurrent selection program involving: Lankart 571, CS 8310, CLWR 1727, DR 19 HTSM, DS 23 HT3, DR 9, New Mexico 1258, and Texas Race Collection entries 790, 791, 1119, 1123, and 1124. other id: GP-442. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall. Maturity medium. Bolls medium to large. Elevated levels of condensed tannins in mature leaves. Perennial. Breeding Material. Seed.
- PI 540275 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86DD-11. pedigree: Recurrent selection program involving: Lankart 571, CS 8310, CLWR 1727, DR 19 HTSM, DS 23 HT3, DR 9, New Mexico 1258, and Texas Race Collection entries 790, 791, 1119, 1123, and 1124. other id: GP-443. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall. Maturity medium. Bolls medium to large. Elevated levels of condensed tannins in mature leaves. Storm resistance poor. Perennial. Breeding Material. Seed.
- PI 540276 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86CC-11. pedigree: Recurrent selection program involving: Lankart 571, CS 8310, CLWR 1727, DR 19 HTSM, DS 23 HT3, DR 9, New Mexico 1258, and Texas Race Collection entries 790, 791, 1119, 1123, and 1124. other id: GP-444. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall. Maturity medium. Bolls small. Elevated levels of condensed tannins in mature leaves. Storm resistance poor. Perennial. Breeding Material. Seed.
- PI 540277 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86DD-12. pedigree: Recurrent selection program involving: Lankart 571, CS 8310, CLWR 1727, DR 19 HTSM, DS 23 HT3, DR 9, New Mexico 1258, and Texas Race Collection entries 790, 791, 1119, 1123, and 1124. other id: GP-445. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall. Maturity medium. Bolls small to medium. Elevated levels of condensed tannins in mature leaves. Fiber length and bundle strength good. Perennial. Breeding Material. Seed.

- PI 540278 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86CC-12. pedigree: Recurrent selection program involving: Lankart 571, CS 8310, CLWR 1727, DR 19 HTSM, DS 23 HT3, DR 9, New Mexico 1258, and Texas Race Collection entries 790, 791, 1119, 1123, and 1124. other id: GP-446. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Compact plant type. Maturity medium. Bolls small. Elevated levels of condensed tannins in mature leaves. Perennial. Breeding Material. Seed.
- PI 540279 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86DD-16. pedigree: Recurrent selection program involving: Lankart 571, CS 8310, CLWR 1727, DR 19 HTSM, DS 23 HT3, DR 9, New Mexico 1258, and Texas Race Collection entries 790, 791, 1119, 1123, and 1124. other id: GP-447. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall. Maturity medium. Bolls medium to large. Elevated levels of condensed tannins in mature leaves. Storm resistance poor. Perennial. Breeding Material. Seed.
- PI 540280 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86CC-13. pedigree: Recurrent selection program involving: Lankart 571, CS 8310, CLWR 1727, DR 19 HTSM, DS 23 HT3, DR 9, New Mexico 1258, and Texas Race Collection entries 790, 791, 1119, 1123, and 1124. other id: GP-448. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall. Maturity medium. Bolls medium to large. Elevated levels of condensed tannins in mature leaves. Perennial. Breeding Material. Seed.
- PI 540281 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86DD-17. pedigree: Recurrent selection program involving: Lankart 571, CS 8310, CLWR 1727, DR 19 HTSM, DS 23 HT3, DR 9, New Mexico 1258, and Texas Race Collection entries 790, 791, 1119, 1123, and 1124. other id: GP-449. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall. Maturity medium. Bolls medium to large. Elevated levels of condensed tannins in mature leaves. Storm resistance poor. Perennial. Breeding Material. Seed.

PI 540274 to 540284-continued

- PI 540282 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86CC-17. pedigree: Recurrent selection program involving: Lankart 571, CS 8310, CLWR 1727, DR 19 HTSM, DS 23 HT3, DR 9, New Mexico 1258, and Texas Race Collection entries 790, 791, 1119, 1123, and 1124. other id: GP-450. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall. Maturity medium. Bolls medium to small. Elevated levels of condensed tannins in mature leaves. Perennial. Breeding Material. Seed.
- PI 540283 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86DD-18. pedigree: Recurrent selection program involving: Lankart 571, CS 8310, CLWR 1727, DR 19 HTSM, DS 23 HT3, DR 9, New Mexico 1258, and Texas Race Collection entries 790, 791, 1119, 1123, and 1124. other id: GP-451. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall, slightly spreading. Maturity medium. Elevated levels of condensed tannins in mature leaves. Bolls small to medium. Perennial. Breeding Material. Seed.
- PI 540284 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86CC-18. pedigree: Recurrent selection program involving: Lankart 571, CS 8310, CLWR 1727, DR 19 HTSM, DS 23 HT3, DR 9, New Mexico 1258, and Texas Race Collection entries 790, 791, 1119, 1123, and 1124. other id: GP-452. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall. Maturity medium. Poor storm resistance. levels of condensed tannins in mature leaves. Bolls medium to small. Perennial. Breeding Material. Seed.
- PI 540285 to 540301. Gossypium hirsutum L. MALVACEAE Upland cotton

Donated by: Smith, C.W., Texas Agr. Exp. Sta., Texas A&M University, Dept. of Soil & Crop Sciences, College Station, Texas, United States. remarks: Seventeen High Tannin Upland Cotton Germplasms Condensed Tannins. Received April 12, 1990.

- PI 540285 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86III-7. pedigree: Stoneville 213 / Texas Race Collection #1055. other id: GP-453. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall, semi-cluster fruiting habit. Maturity medium. Elevated levels of condensed tannins in mature leaves. Bolls medium to large. Perennial. Breeding Material. Seed.
- PI 540286 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86III-8. pedigree: Stoneville 213 / Texas Race Collection #1055. other id: GP-454. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall. Maturity medium. Leaves smooth. Elevated levels of condensed tannins in leaves. Perennial. Breeding Material. Seed.
- PI 540287 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86III-11. pedigree: Roger's 10N / Texas Race Collection #1041. other id: GP-455. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall, semi-cluster fruiting. Maturity medium. Bolls large. Glandless. Nectariless. Elevated levels of condensed tannins in mature leaves. Perennial. Breeding Material. Seed.
- PI 540288 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86III-15. pedigree: Lankart 571 / Texas Race Collection #1124. other id: GP-456. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall, semi-cluster fruiting habit. Maturity medium. Elevated levels of condensed tannins in mature leaves. Bolls large. Perennial. Breeding Material. Seed.
- PI 540289 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86III-16. pedigree: Lankart 571 / Texas Race Collection #1142. other id: GP-457. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall, slight pubescence on leaves and stems. Maturity medium. Up to 3 nectaries per leaf. Elevated levels of condensed tannins in mature leaves. Perennial. Breeding Material. Seed.

- PI 540290 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86III-22. pedigree: Roger's 10N / Texas Race Collection #1041. other id: GP-458. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall. Stems and leaves smooth. Glandless. Nectariless. Maturity medium. Elevated levels of condensed tannins. Bolls large. Perennial. Breeding Material. Seed.
- PI 540291 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86III-24. pedigree: Lankart 571 / Texas Race Collection #1041. other id: GP-459. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Tall and spreading growth habit. Maturity medium. Elevated levels of condensed tannins in mature leaves. Bolls medium to large. Perennial. Breeding Material. Seed.
- PI 540292 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86III-26. pedigree: Lankart 571 / Texas Race Collection #1124. other id: GP-460. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall, semi-cluster fruiting habit, slightly spreading growth. Maturity medium. Elevated levels of condensed tannins in mature leaves. Perennial. Breeding Material. Seed.
- PI 540293 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86III-31. pedigree: CS8310 / Texas Race Collection #1119. other id: GP-461. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants short, semi-cluster fruiting habit. Maturity medium. Elevated levels of condensed tannins in mature leaves. Leaves and stems smooth. Nectariless. Bolls small. Perennial. Breeding Material. Seed.
- PI 540294 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86JJJ-1. pedigree: Stoneville 213 / Rogers glandless. other id: GP-462. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall, semi-cluster fruiting. Maturity medium. Trichomes short. Elevated levels of condensed tannins in mature leaves. Perennial. Breeding Material. Seed.

- PI 540295 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 87M-41. pedigree: Stoneville 213/Texas Race Collection #1055/2/Empire glandless. other id: GP-463. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Tall and spreading growth habit. Maturity medium. Glandless. Elevated levels of condensed tannins in mature leaves. Bolls small. Perennial. Breeding Material. Seed.
- PI 540296 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 87M-48. pedigree: Stoneville 213 / Texas Race Collection #1055/2/Empire glandless. other id: GP-464. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall, semi-cluster fruiting. Maturity medium. Elevated levels of condensed tannins in mature leaves. Stems and leaves near smooth. Bolls medium to large. Glandless. Perennial. Breeding Material. Seed.
- PI 540297 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 87N-3. pedigree: Stoneville 213/ Texas Race Collection #1055/2/Empire glandless. other id: GP-465. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall, semi-cluster fruiting. Maturity medium. Elevated levels of condensed tannins in mature leaves. Bolls medium. Glandless. Perennial. Breeding Material. Seed.
- PI 540298 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 87N-4. pedigree: Stoneville 213/ Texas Race Collection #1055/2/Empire glandless. other id: GP-466. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall, semi-cluster fruiting. Maturity medium. Bolls small. Elevated levels of condensed tannins in mature leaves. Lightly glanded. Perennial. Breeding Material. Seed.

- PI 540299 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 87N-5. pedigree: Stoneville 213/ Texas Race Collection #10555/2/Empire glandless. other id: GP-467. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants tall, spreading type. Maturity medium. Elevated levels of condensed tannins in mature leaves. Glandless. Stems and leaves near smooth. Bolls medium to large. Perennial. Breeding Material. Seed.
- PI 540300 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 87N-6. pedigree: Stoneville 213/ Texas Race Collection #1055/2/Empire glandless. other id: GP-468. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants medium, cluster fruiting habit. Maturity early. Elevated levels of condensed tannins. Glandless. Perennial. Breeding Material. Seed.
- PI 540301 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 87N-7. pedigree: Stoneville 213 / Texas Race Collection #1055. other id: GP-469. source: Crop Sci. 30(6):1374 1990. group: CSR-COTTON. remarks: Plants short, spreading, pubescence short on stems. Maturity medium. Elevated levels of condensed tannins in mature leaves. Leaves smooth. Bolls large. Perennial. Breeding Material. Seed.
- PI 540302 to 540310. Gossypium hirsutum L. MALVACEAE Upland cotton

Donated by: Smith, C.W., Texas Agr. Exp. Sta., Texas A&M University, Dept. of Soil & Crop Sciences, College Station, Texas, United States. remarks: Nine High Tannin Upland Cotton Germplasms Condensed Tannins. Received April 12, 1990.

PI 540302 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86E-3. pedigree: Stoneville 213/ Texas Race Collection #1055/2/Empire glandless. other id: GP-470. source: Crop Sci. 30(6):1375 1990. group: CSR-COTTON. remarks: Plants tall, slightly spreading growth habit. Maturity medium. Elevated levels of condensed tannins in mature leaves. Bolls small. Glandless. Perennial. Breeding Material. Seed.

- PI 540303 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86E-4. pedigree: Stoneville 213 / Texas Race Collection #1055. other id: GP-471. source: Crop Sci. 30(6):1375 1990. group: CSR-COTTON. remarks: Plants tall, slightly spreading growth habit. Maturity medium. Bolls small. Elevated levels of condensed tannins in mature leaves. Perennial. Breeding Material. Seed.
- PI 540304 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86E-6. pedigree: Stoneville 213 / Texas Race Collection #1055. other id: GP-472. source: Crop Sci. 30(6):1375 1990. group: CSR-COTTON. remarks: Plants tall, slightly spreading growth habit. Maturity medium. Elevated levels of condensed tannins in mature leaves. Bolls small. Perennial. Breeding Material. Seed.
- origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86E-7. pedigree: Stoneville 213 / Texas Race Collection #1055. other id: GP-473. source: Crop Sci. 30(6):1375 1990. group: CSR-COTTON. remarks: Plants tall, slightly spreading growth habit. Maturity medium. Elevated levels of condensed tannins in mature leaves. Leaves and stems near smooth. Bolls small. Perennial. Breeding Material. Seed.
- PI 540306 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86E-8. pedigree: Roger's 10N / Texas Race Collection #789. other id: GP-474. source: Crop Sci. 30(6):1375 1990. group: CSR-COTTON. remarks: Plants tall, cluster fruiting habit. Leaves smooth. Stems sparsely pubescent. Maturity medium. Glandless Nectariless. Elevated levels of condensed tannins in mature leaves. Bolls medium to large. Perennial. Breeding Material. Seed.
- PI 540307 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86E-9. pedigree: Roger's 10N / Texas Race Collection #1041. other id: GP-475. source: Crop Sci. 30(6):1375 1990. group: CSR-COTTON. remarks: Plants tall, semi-cluster fruiting. Maturity medium. Bolls large. Glandless. Predominately nectariless. Smooth. Elevated levels of condensed tannins in mature leaves. Perennial. Breeding Material. Seed.

PI 540302 to 540310-continued

- PI 540308 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86E-14. pedigree: Stoneville 213/ Texas Race Collection #1055/2/Empire glandless. other id: GP-476. source: Crop Sci. 30(6):1375 1990. group: CSR-COTTON. remarks: Plants tall, slightly pubescence. Maturity medium. Bolls medium to large. Elevated levels of condensed tannins in mature leaves. Perennial. Breeding Material. Seed.
- PI 540309 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86E-19. pedigree: Stoneville 213 / Texas Collection #1055. other id: GP-477. source: Crop Sci. 30(6):1375 1990. group: CSR-COTTON. remarks: Plants tall, semi-cluster fruiting habit. Sparce pubescence on leaves, stems densely pubescent. Maturity medium. Bolls large. Elevated levels of condensed tannins in mature leaves. Perennial. Breeding Material. Seed.
- PI 540310 origin: United States. origin institute: Texas Agr. Exp. Sta., Dept. of Soil and Crop Sci., Texas A&M University, College Station, Texas 77843. cultivar: TAM 86E-20. pedigree: CS 8310 / Texas Race Collection #1119. other id: GP-478. source: Crop Sci. 30(6):1375 1990. group: CSR-COTTON. remarks: Plants tall, smooth to slight pubescence. Maturity medium. Stem red. Bolls large. Elevated levels of condensed tannins in mature leaves. Perennial. Breeding Material. Seed.
- PI 540311 to 540312. Zea mays L. subsp. mays POACEAE Corn

Donated by: Goodman, M., North Carolina State University, Crop Science Department, Box 7620, Raleigh, North Carolina, United States. Received April 12, 1990.

PI 540311 origin: United States. cultivar: NC34. pedigree: Selfed out of Weekly Improved open-pollinated variety. other id: Raleigh Rows 2 to 11 (1989). remarks: Inbred derived through selfing and pedigree selection. Kernels and cob white, 170cm tall. Ear height 65cm in Raleigh. Poor seed producer, sheds pollen well. Male parent in single cross hybrid NC37 x NC34 that served as male parent of Dixie 17 Double Cross Hybrid. Spring Annual. Breeding Material. Seed.

PI 540311 to 540312-continued

PI 540312 origin: United States. cultivar: NC240. pedigree:
L578/NC601/2/L578. other id: Raleigh Rows 12 to 19
(1989). remarks: Inbred derived through selfing and pedigree selection. Selection was primary for low ear height. Resulted in Brachytic-2 type plant with apparent modifiers for ear height. Moderate brown spot (Physoderma Maydis Miyabe) resistance and contributes yield to its hybrids. Better pollen and seed producer, and sheds pollen slightly earlier than L578. Spring Annual. Breeding Material. Seed.

PI 540313. Sorghum bicolor (L.) Moench POACEAE Milo

Donated by: Duncan, R.R., Georgia Agr. Exp. Sta., University of Georgia, Dept. of Agronomy, Griffin, Georgia, United States; and Agricultural Research Service -- USDA. remarks: GP9BR Aatrex Tolerant Sorghum Germplasm Composite. Received April 12, 1990.

origin: United States. origin institute: Georgia Agr. Exp. Sta., University of Georgia, Dept. of Agronomy, Griffin, Georgia 30223-1797. cultivar: GP9BR. pedigree: Composite of F6-F7 maintainer (B) and restorer (R) parental lines. 3-dwarf height, open to semi-open panicles. other id: GP-314. source: Crop Sci. 31(1):244 1991. group: CSR-SORGHUM. remarks: Tolerant to recommended rates of atrazine ((2-chloro-4-(ethylamino)-6-(isopropylamino)-s-triazine)) applied preemergent on sandy soils. Spring Annual. Breeding Material. Seed.

PI 540314 to 540317. Allium longicuspis Regel LILIACEAE

Donated by: Simon, P.W., USDA-ARS, Dept. of Horticulture, University of Wisconsin, Madison, Wisconsin, United States. Received March 02, 1990.

- PI 540314 donor id: 81. origin: USSR. Cultivated. Bulbs.
- PI 540315 donor id: 82. origin: USSR. Cultivated. Bulbs.
- PI 540316 donor id: 83. origin: USSR. Cultivated. Bulbs.
- PI 540317 donor id: RAL 159. origin: USSR. Cultivated. Bulbs.

PI 540318. Allium sativum L. LILIACEAE

Donated by: Simon, P.W., USDA-ARS, Dept. of Horticulture, University of Wisconsin, Madison, Wisconsin, United States. Received March 02, 1990.

PI 540318-continued

Allium sativum L. var. sativum LILIACEAE origin: Pakistan. cultivar: PESHAWAR WHITE. Cultivated. Bulbs.

PI 540319 to 540320. Allium sativum var. ophioscorodon (Link) Doll LILIACEAE

Donated by: Simon, P.W., USDA-ARS, Dept. of Horticulture, University of Wisconsin, Madison, Wisconsin, United States. Received March 02, 1990.

PI 540319 donor id: R81. origin: Poland. Cultivated. Bulbs.

PI 540320 donor id: R87. origin: Poland. Cultivated. Bulbs.

PI 540321. Allium sativum L. var. sativum LILIACEAE

Donated by: Simon, P.W., USDA-ARS, Dept. of Horticulture, University of Wisconsin, Madison, Wisconsin, United States. Received March 02, 1990.

origin: Syria. cultivar: YABROUDI. Cultivated. Bulbs.

PI 540322 to 540330. Allium sativum L. var. sativum LILIACEAE

Donated by: Simon, P.W., USDA-ARS, Dept. of Horticulture, University of Wisconsin, Madison, Wisconsin, United States. Received March 02, 1990.

- PI 540322 origin: Brazil. cultivar: CATURRA. Cultivated. Bulbs.
- PI 540323 origin: Brazil. cultivar: CHINES DE SAO JOAQUIM. Cultivated. Bulbs.
- PI 540324 origin: Brazil. cultivar: GIGANTE INCONFIDENTES. Cultivated. Bulbs.
- PI 540325 origin: Brazil. cultivar: GRAVATA. Cultivated. Bulbs.
- PI 540326 origin: Brazil. cultivar: JUREIA. Cultivated. Bulbs.
- PI 540327 origin: Brazil. cultivar: MEXICANO-B. Cultivated. Bulbs.
- PI 540328 origin: Brazil. cultivar: MORANO AREQUIPENO-B. Cultivated. Bulbs.
- PI 540329 origin: Brazil. cultivar: PERUANO. Cultivated. Bulbs.

- PI 540322 to 540330-continued
 - PI 540330 origin: Brazil. cultivar: SELECAO 1. Cultivated. Bulbs.
- PI 540331 to 540356. Allium sativum L. var. sativum LILIACEAE

Donated by: Simon, P.W., USDA-ARS, Dept. of Horticulture, University of Wisconsin, Madison, Wisconsin, United States. Received March 02, 1990.

- PI 540331 origin: Czechoslovakia. origin institute: Inst. f. Kulturpft.-Forsch, Prague-Ruzyne. cultivar: HORSKY. other id: 115-85-76. Cultivated. Bulbs.
- PI 540332 origin: Czechoslovakia. origin institute: Inst. f. Kulturpft.-Forsch, Prague-Ruzyne. cultivar: CHINA. other id: 129-85-76. Cultivated. Bulbs.
- PI 540333 origin: Czechoslovakia. origin institute: Forsch.-Inst. Gemusebau, Olomouc. origin institute id: FIG #360. cultivar: DUGGNSKIJ MESTNYJ. other id: 130-85-76. Cultivated. Bulbs.
- PI 540334 origin: Czechoslovakia. origin institute: Forsch.-Inst. Gemusebau, Olomouc. origin institute id: FIG #490. cultivar: MONSANSKIJ. other id: 131-85-76. Cultivated. Bulbs.
- PI 540335 origin: Czechoslovakia. origin institute: Forsch.-Inst. Gemusebau, Olomouc. origin institute id: FIG #374. cultivar: AMERICKY MALY. other id: 132-85-76. Cultivated. Bulbs.
- PI 540336 origin: Czechoslovakia. origin institute: Forsch.-Inst. Gemusebau, Olomouc. origin institute id: FIG #391. cultivar: SEVERSKY PALICAK. other id: 133-85-76. Cultivated. Bulbs.
- PI 540337 origin: Czechoslovakia. origin institute: Forsch.-Inst. Gemusebau, Olomouc. origin institute id: FIG #502. cultivar: ADIZANSKIJ. other id: 136-85-76. Cultivated. Bulbs.
- PI 540338 origin: Czechoslovakia. origin institute: Forsch.-Inst. Gemusebau, Olomouc. cultivar: STAROBELSKIJ BELYJ. other id: 141-85-76. Cultivated. Bulbs.
- PI 540339 origin: Czechoslovakia. origin institute: Inst. f.
 Kulturpft.-Forsch, Prague-Ruzyne. cultivar: TYRNOSKIJ.
 other id: 142-85-76. Cultivated. Bulbs.

PI 540331 to 540356-continued

- PI 540340 origin: Czechoslovakia. origin institute: Forsch.-Inst. Gemusebau, Olomouc. cultivar: JAMPOL SKIJ. other id: 149-85-76. Cultivated. Bulbs.
- PI 540341 origin: German Democratic Repub. other id: 264-85-76. Cultivated. Bulbs.
- PI 540342 origin: German Democratic Repub. other id: 494-85-76. Cultivated. Bulbs.
- PI 540343 origin: German Democratic Repub. other id: 497-85-76. Cultivated. Bulbs.
- PI 540344 origin: German Democratic Repub. other id: 501-85-76. Cultivated. Bulbs.
- PI 540345 origin: German Democratic Repub. other id: 502-85-76. Cultivated. Bulbs.
- PI 540346 origin: German Democratic Repub. other id: 503-85-76. Cultivated. Bulbs.
- PI 540347 origin: German Democratic Repub. other id: 504-85-76. Cultivated. Bulbs.
- PI 540348 origin: German Democratic Repub. other id: 506-85-76. Cultivated. Bulbs.
- PI 540349 origin: German Democratic Repub. other id: 519-85-76. Cultivated. Bulbs.
- PI 540350 origin: German Democratic Repub. other id: 524-85-76. Cultivated. Bulbs.
- PI 540351 origin: Poland. collected: 1978. other id: 525-85-76. locality: Bazanovka by Jacmierz northwest from Sanole. Landrace. Bulbs.
- PI 540352 origin: Czechoslovakia. collected: 1981. other id: 653-85-76. locality: Foothills of White Karpatian Mountains. Landrace. Bulbs.
- PI 540353 origin: Czechoslovakia. collected: 1981. other id: 657-85-76. locality: Cierna Lehata, Strazovsa Vrchy mountain range. Landrace. Bulbs.
- PI 540354 origin: USSR. collected: 1982. other id: 658-85-76. locality: Kulbaki, in a side part of Seitenal d. Schenischkali, Cageri County, Lecchumi. Landrace. Bulbs.
- PI 540355 origin: USSR. other id: 685-85-76. Landrace. Bulbs.

- PI 540331 to 540356-continued
 - PI 540356 origin: USSR. collected: 1983. other id: K6017-85-76. locality: Verchnjaja Mcara, Gudauta County, 310m above sea level in Abchasien. Landrace. Bulbs.
- PI 540357. Allium longicuspis Regel LILIACEAE

Donated by: Swenson, J., 245 Hawthorne Ave., Glencoe, Illinois, United States. Received March 02, 1990.

donor id: 850904-32. origin: USSR. other id: C-751. Cultivated. Bulbs.

PI 540358. Allium sativum L. LILIACEAE

Donated by: Swenson, J., 245 Hawthorne Ave., Glencoe, Illinois, United States. Received March 02, 1990.

Allium sativum L. var. sativum LILIACEAE donor id: 850904-19. origin: United States. origin institute: S&H Organic Acres, Montgomery Creek, California. cultivar: GERMAN RED. Cultivar. Bulbs.

PI 540359 to 540366. Allium sativum var. ophioscorodon (Link) Doll LILIACEAE

Donated by: Swenson, J., 245 Hawthorne Ave., Glencoe, Illinois, United States. Received March 02, 1990.

- PI 540359 donor id: 850904-03. origin: United States. origin institute: Le Jardin du Gourmet, California. cultivar: ROCAMBOLE. remarks: Classic serpent type. Excellent culinary type. Cultivar. Bulbs.
- PI 540360 donor id: 850904-07. origin: United States. origin institute: Good Seed Co., Tonasket, Washington. cultivar: SPANISH RED. remarks: Resembles German Red, Rocambole, and Early Red. Cultivar. Bulbs.
- PI 540361 donor id: 850904-08. origin: United States. cultivar: DE VIVO. remarks: Cloves large. Cultivar. Bulbs.
- PI 540362 donor id: 850904-09. origin: United States. Cultivated. Bulbs.
- PI 540363 donor id: 850904-10. origin: United States. remarks: Escape. Cultivated. Bulbs.

PI 540359 to 540366-continued

- PI 540364 donor id: 850904-12. origin: France. origin institute:
 Botanic Garden, University of Besancon. cultivar:
 BESANCON 7340. other id: Clone 7340. remarks:
 Topsetting type. Cultivar. Bulbs.
- PI 540365 donor id: 850904-14. origin: United States. origin institute: S&H Organic Acres, Montgomery Creek, California. cultivar: EARLY RED. remarks: Topsetting type. Cultivar. Bulbs.
- PI 540366 donor id: 850904-18. origin: United States. cultivar: THUMA. Cultivar. Bulbs.
- PI 540367 to 540374. Allium sativum L. var. sativum LILIACEAE

Donated by: Swenson, J., 245 Hawthorne Ave., Glencoe, Illinois, United States. Received March 02, 1990.

- PI 540367 donor id: 850904-01. origin: United States. cultivar: CHINATOWN. locality: Produce market, Chinatown, San Francisco. remarks: Very vigorous. Resembles California Early. Cultivar. Bulbs.
- PI 540368 donor id: 850904-05. origin: United States. origin institute: Good Seed Co., Tonasket, Washington. cultivar: CHET'S ITALIAN RED. remarks: Bulbs large. Cultivar. Bulbs.
- PI 540369 donor id: 850904-06. origin: United States. cultivar: CREOLE. Cultivar. Bulbs.
- PI 540370 donor id: 850904-11. origin: United States. destoopeal country: United States. origin institute: S&H Organic Acres, Montgomery Creek, California. cultivar: S&H ITALIAN PURPLE. remarks: Vigorous, fast maturing. Bulbs large. Resembles California Early. Cultivar. Bulbs.
- PI 540371 donor id: 850904-13. origin: United States. cultivar: THE VILLAGE MARKET. remarks: Resembles California Late. Cultivar. Bulbs.
- PI 540372 donor id: 850904-15. origin: United States. cultivar: PURPLE MIRANDA. remarks: Vigorous fast maturing. Topsetting type. Cultivar. Bulbs.
- PI 540373 donor id: 850904-16. origin: United States. origin institute: S&H Organic Acres, Montgomery Creek, California. cultivar: SUSANVILLE. remarks: Resembles California Late. Excellent culinary variety. Storage quality good. Cultivar. Bulbs.

- PI 540367 to 540374-continued
 - PI 540374 donor id: 850904-17. origin: United States. cultivar: GIANT CAJUN GARLIC. Cultivar. Bulbs.
- PI 540375 to 540377. Allium sativum L. var. sativum LILIACEAE

Donated by: Coon, L., Paul, Idaho, United States. Received March 02, 1990.

- PI 540375 donor id: A860616-02. origin: United States. cultivar: SILVERSKIN. Cultivar. Bulbs.
- PI 540376 donor id: A860616-03. origin: Yugoslavia. Cultivated. Bulbs.
- PI 540377 donor id: A860616-05. origin: Switzerland. locality: Lucerne. Cultivated. Bulbs.
- PI 540378. Allium sativum L. var. sativum LILIACEAE

Donated by: Swenson, J., 245 Hawthorne Ave., Glencoe, Illinois, United States. Received March 02, 1990.

origin: United States. cultivar: WOODSTOCK. locality: Farmer's market, Woodstock, Inc., Evanston, Henry County, Illinois. remarks: Resembles California Late. Cultivar. Bulbs.

PI 540379. Allium sativum L. var. sativum LILIACEAE

Donated by: Ramirez, P., Soc. Agricola Vista Hermosa LTDA, P.O. Box 20, La Calena, Chile. Received March 02, 1990.

donor id: 870727. origin: Chile. remarks: Received through J. Genuardi, 322 Broadway, King City, CA. Cultivated. Bulbs.

PI 540380. Allium sativum L. var. sativum LILIACEAE

Donated by: Cain, M., Route 4, Box 158, Huntsville, Arkansas, United States. Received March 02, 1990.

donor id: 870817. origin: United States. Cultivated. Bulbs. PI 540381. Alnus sinuata (Regel) Rydb. BETULACEAE Sitka alder

Donated by: Darris, D., Corvallis Plant Material Center, USDA-SCS, 3420 NE Granger Avenue, Corvallis, Oregon, United States. remarks: Received through National Plant Material Center, Beltsville, Maryland. Received January 16, 1990.

donor id: 9040484. origin: United States. pedigree: Increase of wild seed collection. other id: T-40484. other id: CO-965. locality: Skamania County, Oregon. *(Sect. 25, T2N, R6E, WM). remarks: Deciduous shrub 3-6m tall at maturity. Staminate flower up to 10cm long; pistillate flowers 3-6 per branch. Fruit with thin membranous wings usually at least half as broad as the nutlet. Used for stream corridor management and bank erosin control along low-velocity streams and rivers. Potential for reclamation of eroded, low fertility sites and mine spoils and as a companion tree on. Wild. Seed.

PI 540382. Cornus stolonifera var. occidentalis (Torrey & A. Gray) C. Hitchc. CORNACEAE Creek dogwood

Donated by: Darris, D., Corvallis Plant Material Center, USDA-SCS, 3420 NE Granger Avenue, Corvallis, Oregon, United States. remarks: Received through National Plant Material Center, Beltsville, Maryland. Received January 16, 1990.

donor id: 9019459. origin: United States. cultivar: MASON. pedigree: Vegetative increase of native ecotype. other id: T-19459. other id: CO-3321. locality: Mason County, Washington (Sec.15, T21N, R4W). latitude: 37 deg. 17 min. N. longitude: 123 deg. 11 min. W. elevation: 9m. remarks: Shurb, spreading or loosely branched. Flowers small, white, borne in flat-topped clusters. Species spreads by layering lower branches. Fall foliage and stems bright red. Selected for superior branching, rapid growth, plant vigor and fewer visual disease symptoms. Potential use in bank stabilization along streams of low velocity, wildlife food and habitat, and for environmental improvements west. Wild. Plant.

PI 540383. Spiraea douglasii Hook. ROSACEAE Hardhack

Donated by: Darris, D., Corvallis Plant Material Center, USDA-SCS, 3420 NE Granger Avenue, Corvallis, Oregon, United States. remarks: Received through National Plant Material Center, Beltsvlle, Maryland. Received January 16, 1990.

PI 540383-continued

donor id: 501927. origin: United States. cultivar: BASHAW. pedigree: Vegetative increase of a native ecotype. collected: February 1980. other id: T-19297. locality: South Lake, Stevens road, Snohomish Co. *(sec.17, 739N, R6E). remarks: Shrub, erect 1-2m tall. Flowers pink to deep rose pink, pleasantly fragrant. Vigor, denser branching and spread by underground stems superior. Potential use for streambank stabilization along water courses or low velocity west of Cascade Mountains in Oregon, Washington, and northern California. Vigorous. Wild. Plant.

- PI 540384 to 540385. Astracantha cerasocrena (Bunge) Podl. FABACEAE
 - Donated by: Gentry, H.S., 2336 N 57th Place, Scottsdale, Arizona, United States. Received February 23, 1989.
 - PI 540384 donor id: W6-2730. origin: Iran. collector id: 15568B. locality: Dastanah. received as: Astragalus cerasocrenus. Wild. Seed.
 - PI 540385 donor id: W6-2731. origin: Iran. collector id: 15568A. locality: Dastanah. received as: Astragalus cerasocrenus. Wild. Seed.
- PI 540386 to 540389. Astracantha echidniformis (Sirj.) Podl. FABACEAE
 - Donated by: Gentry, H.S., 2336 N 57th Place, Scottsdale, Arizona, United States. Received February 23, 1989.
 - PI 540386 donor id: W6-2731. origin: Iran. collector id: 15635. locality: Musiabad. received as: Astragalus echidnaeformis. Wild. Seed.
 - PI 540387 donor id: W6-2732. origin: Iran. locality: Feridan. received as: Astragalus echidnaeformis. Wild. Seed.
 - PI 540388 donor id: W6-2733. origin: Iran. locality: Feridan. received as: Astragalus echidnaeformis var. elongatus. Wild. Seed.
 - PI 540389 donor id: W6-2734. origin: Iran. locality: Karage. received as: Astragalus echidnaeformis var. elongatus. Wild. Seed.
- PI 540390 to 540393. Astracantha gossypina (Fischer) Podl. FABACEAE
 - Donated by: Gentry, H.S., 2336 N 57th Place, Scottsdale, Arizona, United States. Received February 23, 1989.

- PI 540390 to 540393-continued
 - PÍ 540390 donor id: W6-2735. origin: Iran. collector id: 15560. locality: Kuhe Safed. received as: Astragalus gossypinus. Wild. Seed.
 - PI 540391 donor id: W6-2736. origin: Iran. collector id: 15568. locality: Feridan. received as: Astragalus gossypinus. Wild. Seed.
 - PI 540392 donor id: W6-2737. origin: Iran. locality: Feridan. received as: Astragalus gossypinus. Wild. Seed.
 - PI 540393 donor id: W6-2738. origin: Iran. locality: Karage. received as: Astragalus gossypinus. Wild. Seed.
- PI 540394 to 540395. Astracantha microcephala (Willd.) Podl. FABACEAE

Donated by: Gentry, H.S., 2336 N 57th Place, Scottsdale, Arizona, United States. Received February 23, 1989.

- PI 540394 donor id: W6-2739. origin: Iran. collector id: 15708. locality: Badga, near Shiraz. received as: Astragalus microcephalus. Wild. Seed.
- PI 540395 donor id: W6-2740. origin: Iran. locality: Karage. received as: Astragalus microcephalus. Wild. Seed.
- PI 540396. Astracantha parrowiana (Boiss. & Hausskn.) Podl. FABACEAE

Donated by: Gentry, H.S., 2336 N 57th Place, Scottsdale, Arizona, United States. Received February 23, 1989.

donor id: W6-2741. origin: Iran. received as: Astragalus parrowianus. Wild. Seed.

PI 540397 to 540398. Astragalus sp. FABACEAE

Donated by: Gentry, H.S., 2336 N 57th Place, Scottsdale, Arizona, United States. Received February 23, 1989.

- PI 540397 donor id: W6-2729. origin: Iran. local name: Sherineh. collector id: 15634. locality: Musiabad. Wild. Seed.
- PI 540398 donor id: W6-2728. origin: Iran. local name: Panbeh. locality: Musiabad. Wild. Seed.

PI 540399. Avena sativa L. POACEAE Common oat

Donated by: McMullen, M.S., North Dakota Agr. Exp. Sta., North Dakota State University, Fargo, North Dakota, United States; and Cornell Agr. Exp. Stn.; and Agricultural Research Service -- USDA. remarks: Newdak Oat. Received February 9, 1990.

donor id: ND 810104. origin: United States. origin institute: North Dakota Agr. Exp. Sta., North Dakota State University, Fargo, North Dakota 58105. cultivar: NEWDAK. pedigree: RL3038/Goodland//Ogle. other id: CV-334. group: CSR-OAT. remarks: Grain yield equal or higher than other cultivars tested in North Dakota. Heads 4 days earlier than Dumont. Test weight lower than Dumont. Groat percentage higher than Dumont. Lodging resistance similiar to Steele. Excellent resistance to crown rust (Puccinia coronata), possesses resistance genes Pc-38 and Pc-39. Excellent resistance to prevalent stem rust races, possesses at least. Spring Annual. Cultivar. Seed.

PI 540400. Hordeum vulgare L. POACEAE Barley

Donated by: Kolding, M., Hermiston Agric. Research & Exp. Ctr., Hermiston, Oregon, United States. remarks: Received through Foundation Seed and Plant Materials Project. Received February 12, 1990.

origin: United States. cultivar: E 804. pedigree: Lakeland/Kamiak. remarks: Six rowed type. Maturity medium early. Plants mid-tall. Winter hardiness good. Straw fairly stiff. Moderate resistance to leaf scald. Winter Annual. Breeding Material. Seed.

PI 540401. Triticum aestivum L. POACEAE Common wheat

Donated by: Cholick, F.A., South Dakota State University, Brookings, South Dakota, United States. Received March 1, 1990.

origin: United States. cultivar: SHARP. pedigree:
Butte*2/MN 7125. other id: SD 2980. remarks: Hard red
type. Plants standard height, awned, early heading. Chaff
white. Susceptible to Hessian Fly. Resistant to stem
rust (Puccinia graminis), probable genes Sr5, Sr6 and Sr
wld. Resistant to leaf rust (Puccinia recondita),
probable genes Lr1, Lr10, and Lr13. Spring Annual.
Cultivar. Seed.

Donated by: Simon, P. W., USDA-ARS, Department of Horticulture, University of Wisconsin, Madison, Wisconsin, United States; and Pike, L., Department of Horticulture, Texas A & M University, College Station, Texas, United States; and Swenson, J. F., 245 Hawthorne, Glencoe, Illinois, United States. Received September 06, 1989.

- PI 540402 donor id: U026. origin: USSR. cultivar: VAKHARMAN. collector id: U026. other id: Ames 10684. locality: Village market, Ashkhabad, Turkmen. latitude: 58 deg. 20 min. N. longitude: 38 deg. 00 min. E. remarks: Four plants sampled. Annual. Cultivar. Seed.
- PI 540403 donor id: U035. origin: USSR. cultivar: ALLA-KAUN.
 local name: Black & White melon. collected: July 17,
 1989. collector id: U035. other id: Ames 10687.
 locality: Village market, Samarkand, Uzbek. latitude: 67
 deg. 00 min. N. longitude: 39 deg. 40 min. E. Annual.
 Cultivar. Seed.
- PI 540404 donor id: U036. origin: USSR. cultivar: SARIK-KAUN.
 local name: Yellowskin. collected: July 17, 1989.
 collector id: U036. other id: Ames 10688. locality:
 Village market, Samarkand, Uzbek. latitude: 67 deg. 00
 min. N. longitude: 39 deg. 40 min. E. Annual.
 Cultivar. Seed.
- PI 540405 donor id: U048. origin: USSR. cultivar: KUZHUR. collected: July 19, 1989. collector id: U048. other id: Ames 10693. locality: Samarkand, Uzbek. latitude: 67 deg. 00 min. N. longitude: 39 deg. 40 min. E. elevation: 800m. Annual. Cultivar. Seed.
- PI 540406 donor id: U049. origin: USSR. cultivar: GULIABI ORANGE. collected: July 19, 1989. collector id: U049. other id: Ames 10694. locality: Samarkand, Uzbek. latitude: 67 deg. 00 min. N. longitude: 39 deg. 40 min. E. elevation: 800m. Annual. Cultivar. Seed.
- PI 540407 donor id: U050. origin: USSR. cultivar: OBINNOVVOT. collected: July 19, 1989. collector id: U050. other id: Ames 10695. locality: Samarkand, Uzbek. latitude: 67 deg. 00 min. N. longitude: 39 deg. 40 min. E. elevation: 800m. Annual. Cultivar. Seed.
- PI 540408 donor id: U051. origin: USSR. cultivar: KHALT KHOL. collected: July 19, 1989. collector id: U051. other id: Ames 10696. locality: Samarkand, Uzbek. latitude: 67 deg. 00 min. N. longitude: 39 deg. 40 min. E. elevation: 800m. Annual. Cultivar. Seed.

PI 540402 to 540413-continued

- PI 540409 donor id: U052. origin: USSR. cultivar: VARA TIRISH. collected: July 19, 1989. collector id: U052. other id: Ames 10697. locality: Samarkand, Uzbek. latitude: 67 deg. 00 min. N. longitude: 39 deg. 40 min. E. elevation: 800m. Annual. Cultivar. Seed.
- PI 540410 donor id: U053. origin: USSR. cultivar: BURI KALLA. collected: July 19, 1989. collector id: U053. other id: Ames 10698. locality: Samarkand, Uzbek. latitude: 67 deg. 00 min. N. longitude: 39 deg. 40 min. E. elevation: 800m. Annual. Cultivar. Seed.
- PI 540411 donor id: U054. origin: USSR. cultivar: SAILI. collected: July 19, 1989. collector id: U054. other id: Ames 10699. locality: Samarkand, Uzbek. latitude: 67 deg. 00 min. N. longitude: 39 deg. 40 min. E. elevation: 800m. Annual. Cultivar. Seed.
- PI 540412 donor id: U055. origin: USSR. cultivar: LAZZATLI. collected: July 19, 1989. collector id: U055. other id: Ames 10700. locality: Samarkand, Uzbek. latitude: 67 deg. 00 min. N. longitude: 39 deg. 40 min. E. elevation: 800m. Annual. Cultivar. Seed.
- PI 540413 donor id: U096. origin: USSR. cultivar: TASHLAKY. collected: July 28, 1989. collector id: U096. other id: Ames 10701. locality: Market, Gazalkent, Uzbek. latitude: 69 deg. 50 min. N. longitude: 41 deg. 30 min. E. Annual. Cultivar. Seed.
- PI 540414 to 540416. Cucumis sativus L. CUCURBITACEAE Cucumber

Donated by: Simon, P. W., USDA-ARS, Department of Horticulture, University of Wisconsin, Madison, Wisconsin, United States; and Pike, L., Department of Horticulture, Texas A & M University, College Station, Texas, United States; and Swenson, J. F., 245 Hawthorne, Glencoe, Illinois, United States. Received September 06, 1989.

PI 540414 donor id: U032. origin: USSR. origin institute:
Institute of Veg. & Melons, Uzbek. cultivar: MARGILANSKY
220. collected: July 17, 1989. collector id: U032.
other id: Ames 10685. locality: Village market,
Samarkand, Uzbek. latitude: 67 deg. 00 min. N.
longitude: 39 deg. 40 min. E. remarks: Developed by
Karimov during 1950's. Annual. Cultivar. Seed.

PI 540414 to 540416-continued

- PI 540415 donor id: U033. origin: USSR. origin institute:
 Institute of Veg. & Melons, Uzbek. cultivar:
 UZBEKSKI-740. collected: July 17, 1989. collector id:
 U033. other id: Ames 10686. locality: Village market,
 Samarkand, Uzbek. latitude: 67 deg. 00 min. N.
 longitude: 39 deg. 40 min. E. remarks: Developed by
 Karimov during 1950's. Susceptible to Peranospora sp.
 Fruit quality good. Annual. Cultivar. Seed.
- PI 540416 donor id: U045. origin: USSR. origin institute:
 Institute of Veg. & Melons, Uzbek. cultivar: UZBEK-740.
 collected: July 18, 1989. collector id: U045. other id:
 Ames 10690. locality: Village market, Samarkand, Uzbek.
 latitude: 67 deg. 00 min. N. longitude: 39 deg. 40 min.
 E. elevation: 800m. remarks: Susceptible to Peranospora
 sp. Annual. Cultivar. Seed.

PI 540417. Cucurbita pepo L. CUCURBITACEAE Pumpkin

Donated by: Simon, P. W., USDA-ARS, Department of Horticulture, University of Wisconsin, Madison, Wisconsin, United States; and Pike, L., Department of Horticulture, Texas A & M University, College Station, Texas, United States; and Swenson, J. F., 245 Hawthorne, Glencoe, Illinois, United States. Received September 06, 1989.

donor id: U047. origin: USSR. collector id: U047.
other id: Ames 10692. locality: Samarkand, Uzbek.
latitude: 67 deg. 00 min. N. longitude: 39 deg. 40 min.
E. elevation: 800m. remarks: Used for fodder. Annual.
Cultivated. Seed.

PI 540418 to 540422. Daucus carota L. APIACEAE

Donated by: Simon, P. W., USDA-ARS, Department of Horticulture, University of Wisconsin, Madison, Wisconsin, United States; and Pike, L., Department of Horticulture, Texas A & M University, College Station, Texas, United States; and Swenson, J. F., 245 Hawthorne, Glencoe, Illinois, United States. Received September 06, 1989.

PI 540418 donor id: U044. origin: USSR. collected: July 19, 1989. collector id: U044. other id: Ames 10689. locality:
Roadside, Uloch, 50km E Kitab, Uzbek. latitude: 67 deg. 20 min. N. longitude: 39 deg. 20 min. E. elevation: 600m. remarks: Twenty plants sampled from population of 1000. Biennial. Primtiv-cv. Seed.

PI 540418 to 540422-continued

- PI 540419 donor id: U046. origin: USSR. cultivar: MIRZOE MUSHTAK. collected: July 19, 1989. collector id: U046. other id: Ames 10691. locality: Samarkand, Uzbek. latitude: 67 deg. 00 min. N. longitude: 39 deg. 40 min. E. elevation: 800m. Biennial. Primtiv-cv. Seed.
- PI 540420 donor id: U097. origin: USSR. collected: July 28, 1989. collector id: U097. other id: Ames 10702. locality: Peskm, Uzbek. latitude: 70 deg. 20 min. N. longitude: 41 deg. 40 min. E. elevation: 1700m. remarks: Four plants sampled. Biennial. Wild. Seed.
- PI 540421 donor id: U108. origin: USSR. collected: July 30, 1989. collector id: U108. other id: Ames 10703. locality:
 Aksu Djabagly Reserve, Kazakh. latitude: 70 deg. 10 min.
 N. longitude: 42 deg. 00 min. E. remarks: Six plants sampled from population of 500. Biennial. Wild. Roots.
- PI 540422 donor id: Ull0. origin: USSR. collected: July 31, 1989. collector id: Ull0. other id: Ames 10812. locality: Commercial market, Tashkent, Uzbek. latitude: 69 deg. 20 min. N. longitude: 41 deg. 20 min. E. remarks: Root short, yellow. Biennial. Primtiv-cv. Seed.
- PI 540423. Beckmannia syzigachne (Steud.) Fern. POACEAE American sloughgrass

Donated by: Wright, S.J., Alaska Plant Materials Center, Division of Agriculture-DNR, Palmer, Alaska, United States. remarks: Egan American Sloughgrass. Received April 24, 1990.

origin: United States. origin institute: Alaska Plant Materials Center, Division of Agriculture-DNR, Palmer, Alaska 99645. cultivar: EGAN. pedigree: Selection from single wild growing plant. other id: T12053. other id: 9062402. other id: CV-143. group: CSR-OTHER GRASSES. locality: North of Fairbanks. remarks: Short-lived, wetland grass. Plants average 68cm in height in ideal conditions. In general exhibits tufted form, in rare instances rhizomatous individuals encountered. Seed matures in second or third week of August in southcentral Alaska. Seed yields average 400lbs. per acre. Irrigation necessary. Perennial. Cultivar. Seed.

PI 540424. Artemisia tilesii Ledeb. ASTERACEAE Tilesy sage

Donated by: Wright, S.J., Alaska Plant Materials Center, Division of Agriculture--DNR, Palmer, Alaska, United States. remarks: Caiggluk Tilesy Sage. Received April 24, 1990.

PI 540424-continued

origin: United States. origin institute: Alaska Plant Materials Center, Division of Agriculture--DNR, Palmer, Alaska 99645. cultivar: CAIGGLUK. pedigree: Selection from single wild growing plant. Continued increase has been under field isolation open pollenated. other id: T12052. other id: 9062401. other id: CV-3. group: CSR-MISC CROP. locality: Clam Gulch. remarks: Multi-stemmed, herbaceous, non-woody sagebrush indigenous to Alaska. Mature seed by mid-September. Height 114cm under seed production conditions. When grown under conditions found in revegetation or reclamation projects, will grow to 51 to 65cm. Intended solely for revegatation and reclamation. Perennial. Cultivar. Seed.

PI 540425. Poa alpina L. POACEAE Alpine bluegrass

Donated by: Wright, S.J., Alaska Plant Materials Center, Division of Agriculture--DNR, Palmer, Alaska, United States. remarks: Gruening Alpine Bluegrass. Received April 24, 1990.

origin: United States. origin institute: Alaska Plant Materials Center, Division of Agriculture--DNR, Palmer, Alaska 99645. cultivar: GRUENING. pedigree: Single selection from PI 235491. other id: T12052. other id: 9062401. other id: CV-45. group: CSR-BLUEGRASS. remarks: Uniform and very low-growing bunch grass. Plants do not exceed 30cm. Foliage rarely exceeds 15cm. Maturity remarkably early. Seed harvested last week in June or first week in July in Palmer, Alaska. Influorescences form simultaneously with spring recovery. Seed yield 2001bs. per acre. Perennial. Cultivar. Seed.

PI 540426. Chrysopogon gryllus subsp. echinulatus (Nees) Cope POACEAE

Donated by: Rumbaugh, M.D.; Johnson, D.A., Forage and Range Research, USDA-ARS, Logan, Utah, United States. Received October 14, 1986.

donor id: JR-11. origin: Pakistan. collected: October 13, 1985. collector id: JR-11. other id: UTAH 2404. locality: Roadside, Highway 343, Arcos de la Frontera, 31km NE of Jerez de la Frontera. Wild. Seed.

PI 540427 to 540428. Dactylis glomerata L. POACEAE Orchardgrass

- PI 540427 to 540428-continued
 - PI 540427 donor id: JR-8. origin: Pakistan. collected: October 13, 1985. collector id: JR-8. other id: UTAH 2395. locality: S of Kalam (Swat area), Swat River Valley near village of Peshmal. Wild. Seed.
 - PI 540428 donor id: JR-27. origin: Pakistan. collected: October 17, 1985. collector id: JR-27. other id: UTAH 2394. locality: Semi-protected shady area, Naltar Valley 48km NW of Gilgrit, near Airforce Rest House. elevation: 2736m. remarks: Rhizome development. Abundant green leaves. Most other species dormant. Wild. Seed.
- PI 540429. Malva sp. MALVACEAE

Donated by: Rumbaugh, M.D.; Johnson, D.A., Forage and Range Research, USDA-ARS, Logan, Utah, United States. Received October 14, 1986.

donor id: JR-4. origin: Pakistan. local name: Sanchal. collected: October 12, 1985. collector id: JR-4. other id: UTAH 2411. locality: Purchased farm seed, Kalam, Northern Swat Valley. remarks: Leaves used like spinach, boiled and minced. Cultivated. Seed.

PI 540430 to 540431. Medicago lupulina L. FABACEAE Black medic

Donated by: Rumbaugh, M.D.; Johnson, D.A., Forage and Range Research, USDA-ARS, Logan, Utah, United States. Received October 14, 1986.

- PI 540430 donor id: JR-12. origin: Pakistan. collected: October 13, 1985. collector id: JR-12. other id: UTAH 2398. locality: Roadside, Highway 343, Arcos de la Frontera, 31km NE of Jerez de la Frontera. remarks: Stem 0.75m long. Wild. Seed.
- PI 540431 donor id: JR-24. origin: Pakistan. collected: October 17, 1985. collector id: JR-24. locality: Naltar Valley, 48km NW of Gilgit on Jeep trail. elevation: 2736m. remarks: Small. Stems 10cm long. Wild. Seed.
- PI 540432. Pennisetum lanatum Klotzsch POACEAE

PI 540432-continued

donor id: JR-28. origin: Pakistan. collected: October 17, 1985. collector id: JR-28. locality: Steep-slope hillside. remarks: Rhizomatous up to lm. Wild. Seed.

PI 540433. Phacelurus speciosus (Steudel) C. E. Hubb. POACEAE

Donated by: Rumbaugh, M.D.; Johnson, D.A., Forage and Range Research, USDA-ARS, Logan, Utah, United States. Received October 14, 1986.

donor id: JR-9. origin: Pakistan. collected: October 13, 1985. collector id: JR-9. other id: UTAH 2410. locality: Roadside, Highway 343, Arcos de la Frontera, 31km NE of Jerez de la Frontera. Wild. Seed.

PI 540434. Piptatherum gracile Mez POACEAE

Donated by: Rumbaugh, M.D.; Johnson, D.A., Forage and Range Research, USDA-ARS, Logan, Utah, United States. Received October 14, 1986.

donor id: JR-13. origin: Pakistan. collected: October 13, 1985. collector id: JR-13. other id: UTAH 2409. locality: Protected native grass and forb stand, across river on forage hillside, near Peshmal, on road to Kalam from Mingero. remarks: Solitary plants 0.5-1.0m tall. Abundant. No apparent rhizomes. Wild. Seed.

PI 540435. Rosa moschata Herrm. ROSACEAE Musk rose

Donated by: Rumbaugh, M.D.; Johnson, D.A., Forage and Range Research, USDA-ARS, Logan, Utah, United States. Received October 14, 1986.

donor id: JR-31. origin: Pakistan. local name: Chingi. collected: October 17, 1985. collector id: JR-31. other id: UTAH 2396. locality: Naltar Valley. elevation: 2736m. remarks: Plants 2 1/2m tall. Widely distributed in this region. Used for medicine, fruit for purification of blood, and bark for tea. Wild. Seed.

PI 540436. Erianthus ravennae (L.) P. Beauv. POACEAE

PI 540436-continued

donor id: JR-40. origin: Pakistan. local name: Saroot. collected: October 18, 1985. collector id: JR-40. other id: UTAH 2406. locality: Irrigation river courses, 3km NW of Gilgit on road to Normal. remarks: Plants up to 4m tall. Bunch type habit. Palatable only at early stages. Used for roof thatching. Good for ornamental purposes. received as: Saccharum rarennae. Wild. Seed.

PI 540437. Trifolium pratense L. FABACEAE Red clover

Donated by: Rumbaugh, M.D.; Johnson, D.A., Forage and Range Research, USDA-ARS, Logan, Utah, United States. Received October 14, 1986.

donor id: JR-33. origin: Pakistan. collected: October 17, 1985. collector id: JR-33. other id: UTAH 2405. locality: Mid Naltar Valley. remarks: Plants robust with leaf markings. Flowers red. Wild. Seed.

PI 540438 to 540439. Trifolium sp. FABACEAE

Donated by: Rumbaugh, M.D.; Johnson, D.A., Forage and Range Research, USDA-ARS, Logan, Utah, United States. Received October 14, 1986.

- PI 540438 donor id: JR-1. origin: Pakistan. local name: Shaftal. collected: October 10, 1985. collector id: JR-1. other id: UTAH 2388. locality: Swat Valley, Madyan. remarks: Used for green chop to pasture. Seed sent from Peshawar. Cultivated. Seed.
- PI 540439 donor id: JR-23. origin: Pakistan. collected: October 17, 1985. collector id: JR-23. other id: UTAH 2397. locality: Naltar Valley, 30km NW of Gilgit on Jap Trail. elevation: 2736m. remarks: Plants small. Leaf markings varied. Abundant. Possible mixture of species. Wild. Seed.
- PI 540440. Trigonella gracilis Benth. FABACEAE

PI 540440-continued

donor id: JR-15. origin: Pakistan. local name: Chabister. collected: October 14, 1985. collector id: JR-15. other id: UTAH 2399. locality: Grassy protected hillside, SE exposure. Steep slope SE of Shangla between Khwazela and Besharn. remarks: Used for cooking. Wild. Seed.

PI 540441. Leymus arenarius (L.) Hochst. POACEAE European dunegrass

Donated by: Knudson, M., Bismarck Plant Materials Center, USDA-SCS, P.O. Box 1458, Bismarck, North Dakota, United States. remarks: Received through National Plant Materials Center, Beltsville, Maryland. Received April 02, 1990.

donor id: 9008065. origin: United States. origin institute: Soil Conservation Service -- USDA, Bismarck Plant Materials Center, P.O. Box 1458, Bismarck, North Dakota 58502. cultivar: ELAR. pedigree: Composite of four vegetative samples. other id: ND-2100. remarks: Plants cool-season, cross pollinated, rhizomatous with stout stems, 60-120cm tall. Leaves bluish-green, up to 1.5cm wide, flat or involute during drought. Ligules short, truncate. Spikes compact, up to 16 inches long. Potential for dune and shoreline stabilization. Adapted to North Dakota, South Dakota, Minnesota, and Montana. received as: Elymus arenarius. Perennial. Cultivated. Seed.

PI 540442. Prunus tenella Batsch ROSACEAE Russian almond

Donated by: Knudson, M., Bismarck Plant Materials Center, USDA-SCS, P.O. Box 1458, Bismarck, North Dakota, United States. remarks: Received through National Plant Materials Center, Beltsville, Maryland. Received April 02, 1990.

donor id: 9006079. origin: United States. origin institute: Soil Conservation Service -- USDA, Bismarck Plant Materials Center, P.O. Box 1458, Bismarck, North Dakota 58502. cultivar: PRTE80. pedigree: Single selection of introduction from Canada. other id: ND-283. remarks: Short, densely suckering shrub, may reach 1.5m in height. Leaves simple, saw toothed margins, lustrous, dark green above, pale beneath. Flowers attractive pink in May, followed by hard nut with fuzzy covering in July. Ideal for erosion control and slope plantings and cover for wildlife habitat and nesting. Possible ornamental or foundation plantings in home landscaping. Adapted in areas. Cultivated. Seed.

PI 540443. Syringa villosa Vahl OLEACEAE Late lilac

Donated by: Knudson, M., Bismarck Plant Materials Center, USDA-SCS, P.O. Box 1458, Bismarck, North Dakota, United States. remarks: Received through National Plant Materials Center, Beltsville, Maryland. Received April 02, 1990.

donor id: 9006228. origin: United States. origin institute: Soil Conservation Service -- USDA, Bismarck Plant Materials Center, P.O. Box 1458, Bismarck, North Dakota 58502. cultivar: SYV180. pedigree: Single selection of introduction from Canada. other id: ND-83. remarks: Coarse, upright, dense shrub, 10 feet at maturity. Leaves large, deeply veined. Flowers pink to white, bloom mid-June. Flowers borne in dense pyramidal panicles, three to seven inches long. Fruit is capsule containing two seeds. Growth rate slow to medium. Non-suckering habit. Used in field or farmstead windbreaks, and border or recreational area plantings. Good cover for wildlife. Adapted for hardiness in. Cultivated. Seed.

PI 540444. Amaranthus hypochondriacus L. AMARANTHACEAE

Donated by: Rodale Research Center, Rodale Press, RD 1, Box 323, Kutztown, Pennsylvania, United States. Received April 30, 1990.

origin: UNKNOWN. remarks: Early maturing, the leaves are green, the flowers are green, the seeds are white and gold. The RRC type is: Nepal. Annual. Cultivar. Seed.

PI 540445. Amaranthus viridis L. AMARANTHACEAE

Donated by: Rodale Research Center, Rodale Press, RD 1, Box 323, Kutztown, Pennsylvania, United States. Received April 30, 1990.

origin: Indonesia. locality: Bogor. remarks: Flower
color rust orange. Leaf color green. Seed color black.
RRC Class type: weed. Annual. Wild. Seed.

PI 540446. Amaranthus hypochondriacus L. AMARANTHACEAE

Donated by: Rodale Research Center, Rodale Press, RD 1, Box 323, Kutztown, Pennsylvania, United States. Received April 30, 1990.

PI 540446-continued

origin: Pakistan. pedigree: Bulked from RRC 80, which is the same as PI 274275 and AVRDC 74-37. The selection was done at Rodale Research Center, from their seed lot number RRC 77S-80. remarks: Lygus resistant, early maturing, uniform, lodges, the leaves are green and rufescent, the flowers red, the seeds black. type is: prima. Indian grain type. Annual. Breeding Material. Seed.

PI 540447. Amaranthus hybridus L. AMARANTHACEAE

Donated by: Rodale Research Center, Rodale Press, RD 1, Box 323, Kutztown, Pennsylvania, United States. Received April 30, 1990.

origin: United States. origin institute: Redwood Seed Company, P. O. Box 361, Redwood City 94064. remarks: Early maturing, very productive, the leaves are green, the flowers are red, and the seeds are dark brown. The RRC type prima. Annual. Cultivar. Seed.

PI 540448. Gossypium hirsutum L. MALVACEAE Cotton

Donated by: Helena Chemical Company, United States. Received April 30, 1990.

origin: United States. cultivar: HS 23. other id: PVP 9000150. source: Pending. group: PVPO. Cultivar. Seed.

PI 540449 to 540450. Medicago sativa L. FABACEAE Alfalfa

Donated by: Pioneer Hi-Bred International, United States. Received April 30, 1990.

- PI 540449 origin: United States. cultivar: 5373. other id: PVP 9000152. source: Pending. group: PVPO. Cultivar. Seed.
- PI 540450 origin: United States. cultivar: 5472. other id: PVP 9000153. source: Pending. group: PVPO. Cultivar. Seed.
- PI 540451. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Land O'Lakes, Inc., United States. Received April 30, 1990.

PI 540451-continued

origin: United States. cultivar: L2333. other id: PVP 9000143. source: Pending. group: PVPO. Cultivar. Seed.

PI 540452 to 540456. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Asgrow Seed Co., United States. Received April 30, 1990.

- PI 540452 origin: United States. cultivar: A 2427. other id: PVP 9000144. source: Pending. group: PVPO. Cultivar. Seed.
- PI 540453 origin: United States. cultivar: A 2872. other id: PVP 9000145. source: Pending. group: PVPO. Cultivar. Seed.
- PI 540454 origin: United States. cultivar: A 2396. other id: PVP 9000146. source: Pending. group: PVPO. Cultivar. Seed.
- PI 540455 origin: United States. cultivar: XL1901. other id: PVP 9000147. source: Pending. group: PVPO. Cultivar. Seed.
- PI 540456 origin: United States. cultivar: A 7258. other id: PVP 9000151. source: Pending. group: PVPO. Cultivar. Seed.

PI 540457. Brassica napus L. BRASSICACEAE Rape

Donated by: Auld, D.L., Idaho Agr. Exp. Sta., University of Idaho, Moscow, Idaho, United States; and Georgia Agr. Exp. Sta.; and Agricultural Research Service -- USDA. remarks: Rebel Winter Rapeseed. Received April 30, 1990.

origin: United States. origin institute: Idaho Agr. Exp. Sta., University of Idaho, Dept. of Plant, Soil and Ent. Sci., Mowcow, Idaho 83843. cultivar: REBEL. pedigree: F6 line from OAC Triton/WRE-17. other id: PVP 9000148. source: Pending. group: PVPO. other id: CV-8. group: CSR-RAPESEED. other id: 3-316-2. remarks: Tolerant to triazine herbicides. Adapted to southeastern United States. Winter Annual. Cultivar. Seed.

PI 540458. Brassica napus L. BRASSICACEAE Rape

Donated by: Auld, D.L., Idaho Agr. Exp. Sta., University of Idaho, Moscow, Idaho, United States. Received April 30, 1990.

PI 540458-continued

origin: United States. cultivar: CATHY. other id: PVP 9000149. source: Pending. group: PVPO. Cultivar. Seed.

PI 540459. Pisum sativum L. FABACEAE Pea

Donated by: Asgrow Seed Co., United States. Received March 21, 1990.

origin: United States. cultivar: PRONTO. other id: PVP 9000095. source: Pending. group: PVPO. Cultivar. Seed.

PI 540460. Arachis hypogaea L. FABACEAE Peanut

Donated by: Wynne, J.C., North Carolina Agr. Res. Service, North Carolina State University, Raleigh, North Carolina, United States; and Virginia Agr. Exp. Sta.. remarks: NC 10C Peanut. Received April 26, 1990.

origin: United States. origin institute: North Carolina Agr. Res. Service, North Carolina State University, Dept. of Crop Science, Raleight, North Carolina 27695. cultivar: NC 10C. pedigree: NC 2/A48/Florigiant///Florigiant. other id: PVP 8900116. source: Pending. group: PVPO. other id: CV-39. group: CSR-PEANUT. remarks: Large-seeded virginia-type with runner growth habit. Moderate resistance to Cylindrocladium crotalariae. Acceptable agronomic performance. Maturity 150 days. Mainstem height 12cm. Seed pink, cylindrical-shaped, tapered ends, weight 77 g/100 seed. Spring Annual. Cultivar. Seed.

PI 540461. Arachis hypogaea L. FABACEAE Peanut

Donated by: Wynne, J.C., North Carolina Agr. Res. Service, North Carolina State Univ., Raleigh, North Carolina, United States; and Virginia Agr. Exp. Sta.; and Agricultural Research Service -- USDA. remarks: NC-Vll Peanut. Received April 26, 1990.

PI 540461-continued

origin: United States. origin institute: North Carolina Agr. Res. Service, North Carolina State University, Crop Science Dept., Raleigh, North Carolina 27695. cultivar: NC-Vll. pedigree: Florigiant/NC 5//Florigiant/Valencia. other id: PVP 9000197. source: Pending. group: PVPO. other id: CV-40. group: CSR-PEANUT. remarks: Large-seeded virginia-type with runner growth habit. Yield and value per acre high. Maturity 145 days. Mainstem height 25cm. Seed pink, cylindrical-shaped, tapered ends, weight 80 g/100 seed. No pest or disease resistance has been identified. Spring Annual. Cultivar. Seed.

PI 540462 to 540466. Zea mays L. subsp. mays POACEAE Dent corn

Donated by: York, J.O., Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas, United States. remarks: Five Maize Germplasms. Received April 27, 1990.

- PI 540462 origin: United States. origin institute: Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701. cultivar: ARK. SWCB SYN.. pedigree: One cycle of recurrent selection was conducted using manually infested southwestern corn-borer eggs in a synthetic variety composed of the inbred lines AKd24, AKd34, Ark. H-13, Ark. H-24, Ark. H-77, AKW 413.2, Mp 460, and T105. other group: CSR-MAIZE. remarks: Original id: GP-230. population developed for a source of genes for resistance to the southwestern corn borer. Selection was for resistance to leaf-feeding damage and to stalk invasion. Resistance to corn virus complex (maize dwarf mosaic A and maize chlorotic dwarf) disease. It is predominately a yellow endosperm synthetic with maturity classification of AES1000. Spring Annual. Breeding Material.
- PI 540463 origin: United States. origin institute: Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701. cultivar: ARK. LEAF FEED RES. SYN.. pedigree: Synthetic developed from the inbred lines A295, MS1, Oh41, Oh 43, Oh 45, R61 and a inbred line from the cross of (A392/R61). All contain the Lancaster source of resistance to the European corn borer. other id: GP-231. group: CSR-MAIZE. remarks: Synthetic developed as a source of genes for resistance to leaf-feeding damage by the southwestern and European corn borers. Selection for resistance was conducted using manually infested southwestern corn borer eggs. Yellow-endosperm synthetic with a maturity classification of AES800. Spring Annual. Breeding Material. Seed.

- PI 540464 origin: United States. origin institute: Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701. cultivar: ARK. CORN-BORER COMPOSITE #1. pedigree: Composite composed of Ark. SWCB Syn., Ark. Leaf Feed Res. Syn., Ala. European Corn Borer Syn., Mp SWCB-1, Mp SWCB-2, and Mp SWCB-4. other id: GP-232. group: CSR-MAIZE. remarks: Composite developed as a source of genes for resistance to leaf feeding and stalk invasion by southwestern and European corn borers. Intermated each year since 1977 with selection being made at harvest against undesirable plant types and borer infested plants. Yellow-endosperm population with maturity classification of AES800-1200. Spring Annual. Breeding Material. Seed.
- PI 540465 origin: United States. origin institute: Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701. cultivar: ARK. CORN-BORER COMPOSITE #2. pedigree: Intermated composite from cross [Ark. Corn-Borer Composite #1/(B86/B52)]. other id: GP-233. group: CSR-MAIZE. remarks: Composite developed as a source of genes for resistance to European and southwestern corn borers. Intermated each year since 1985 with selection being made at harvest against undesirable plant types and borer infested plants. Yellow-endosperm population with maturity classification of AES800-1200. Spring Annual. Breeding Material. Seed.
- PI 540466 origin: United States. origin institute: Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701. cultivar: ARK. CORN-BORER COMPOSITE #3. pedigree: Intermated composite composed of Ark. Corn-Borer Composite #1, Ark. Corn-Borer Composite #2, and double crosses from Mp 701, Mp 702, Mp 704, Mp 705, Mp 706, and Mp 707. other id: GP-234. group: CSR-MAIZE. remarks: Composite developed as a source of genes for resistance to European and southwestern corn borers. Intermated each year since 1987 with selection being made at harvest against undesirable plant types and borer infested plants. Yellow-endosperm population with maturity classification of AES800-1200. Spring Annual. Breeding Material. Seed.
- PI 540467 to 540487. Arachis hypogaea L. FABACEAE Peanut

Donated by: Peanut Research Institute, Laixi, Shandong, China. remarks: Received through Morris Porter, Tidewater Research Center, USDA-ARS, P.O. Box 7099, Suffolk, Virginia 23437. Received April 02, 1990.

PI 540467 to 540487-continued

- PI 540467 origin: China. cultivar: 8410-33-2. pedigree: 78212/8260. Cultivar. Seed.
- PI 540468 origin: China. cultivar: 8352-4-4-3. pedigree: 61003/78105-0-79. Cultivar. Seed.
- PI 540469 origin: China. cultivar: 8204-2-1-1. pedigree: 73/30//PI 393518. Cultivar. Seed.
- PI 540470 origin: China. cultivar: 8205-18-1-1. pedigree: 73/30//NcAc/7090. Cultivar. Seed.
- PI 540471 origin: China. cultivar: 8265-6-0-1. pedigree: 74/20//8120. Cultivar. Seed.
- PI 540472 origin: China. cultivar: 8101-9-1-0-1. pedigree: Peanut 28//PI 259747. Cultivar. Seed.
- PI 540473 origin: China. cultivar: 8105-8-2-1-3-1. pedigree: 73-43/PI 19090. remarks: Male parent not valid PI number. Cultivar. Seed.
- PI 540474 origin: China. cultivar: 8105-8-3-1-2-1. pedigree: 73-43/PI 19090. remarks: Male parent not valid PI number. Cultivar. Seed.
- PI 540475 origin: China. cultivar: 8122-7-1-2-1. pedigree: Peanut 28/White Sand 13-1. Cultivar. Seed.
- PI 540476 origin: China. cultivar: 8369-6-3-1. pedigree: 79251/78105-0-79. Cultivar. Seed.
- PI 540477 origin: China. cultivar: 8373-6-4-1. pedigree: 7862-0-7/78105-0-80. Cultivar. Seed.
- PI 540478 origin: China. cultivar: P8015. pedigree: X ray selection Gamma 2.5 rads #39/Gamma 2.5 rads 7101-43. Cultivar. Seed.
- PI 540479 origin: China. cultivar: P8122. pedigree: P2/5-5. Cultivar. Seed.
- PI 540480 origin: China. cultivar: P8128. pedigree: Backcross (P2*China 2-13)F1/China 2-13. Cultivar. Seed.
- PI 540481 origin: China. cultivar: P8112. pedigree: V 12-5/68-4. Cultivar. Seed.
- PI 540482 origin: China. cultivar: P8217. pedigree: P12/RH 77-8. Cultivar. Seed.

PI 540467 to 540487-continued

- PI 540483 origin: China. cultivar: P808. pedigree: China 2-13/Peanut 17. Cultivar. Seed.
- PI 540484 origin: China. cultivar: P811. pedigree: 5-5/Peanut 17. Cultivar. Seed.
- PI 540485 origin: China. cultivar: P84. pedigree: X ray Gamma 2.5 rads H 79-2-1. Cultivar. Seed.
- PI 540486 origin: China. cultivar: P8223. pedigree: P 12-5-1/White Sand 171. Cultivar. Seed.
- PI 540487 origin: China. cultivar: P8315. pedigree: H 79-2/Bright P 6-2. Cultivar. Seed.

PI 540488 to 540508. Arachis hypogaea L. FABACEAE Peanut

Donated by: Liaoning Provincial Acad. of Agr. Sci., Shenyang, Liaoning, China. remarks: Received through Morris Porter, Tidewater Research Center, USDA-ARS, P.O. Box 7099, Suffolk, Virginia 23437. Received April 02, 1990.

- PI 540488 origin: China. cultivar: JINJIAU #1. pedigree:
 Excellent peanut/Beijing Large Peanut. Cultivar. Seed.
- PI 540489 origin: China. cultivar: 7207-1-2(3). pedigree: 6301-84/Hsu Line #9. Cultivar. Seed.
- PI 540490 origin: China. cultivar: 6301-84. pedigree: Jinjuang Peanut/Wulenzhapouton. Cultivar. Seed.
- PI 540491 origin: China. cultivar: 6401-4. pedigree: Excellent peanut/Hunam Large Peanut. Cultivar. Seed.
- PI 540492 origin: China. cultivar: 6411-5. pedigree: Wazu Large Peanut/ Shantonpintulida. Cultivar. Seed.
- PI 540493 origin: China. cultivar: 6426-6. pedigree: Russian Peanut /Wendien Shauli. Cultivar. Seed.
- PI 540494 origin: China. cultivar: 6429-4. pedigree: Wazu Peanut/Excellent Peanut. Cultivar. Seed.
- PI 540495 origin: China. cultivar: 7214-1-1(2). pedigree: White Sand 171/Wazu Large Peanut(*Good Peanut). Cultivar. Seed.
- PI 540496 origin: China. cultivar: JINIOU. pedigree: White Sand 1016 1st selection after x-ray. remarks: Testa purple. Seed size medium. Cultivar. Seed.

PI 540488 to 540508-continued

- PI 540497 origin: China. cultivar: FOSSEN SMALL SIZE #2.
 locality: Farmers variety, Fossen-Place. Cultivar.
 Seed.
- PI 540498 origin: China. cultivar: CHAUZULISHU. locality: Farmers variety, Chauzu-Place. Cultivar. Seed.
- PI 540499 origin: China. cultivar: SENSU SMALL PEANUT. locality: Farmers variety, Senzu-Place. Cultivar. Seed.
- PI 540500 origin: China. cultivar: 7109-5-3(2). pedigree: 6401-1(IV)/White Sand 1016 + Jianlida. remarks: Farmer's variety. Excellent large type. Cultivar. Seed.
- PI 540501 origin: China. cultivar: JINSEN. remarks: Farmer's variety. Excellent large type. Cultivar. Seed.
- PI 540502 origin: China. cultivar: SINJIN LIDA. locality: Farmer's variety, Sinjin-Place. Cultivar. Seed.
- PI 540503 origin: China. cultivar: ERPA. remarks: Farmer's variety. Cultivar. Seed.
- PI 540504 origin: China. cultivar: SHUN-UE. remarks: Farmer's variety. Excellent large type. Cultivar. Seed.
- PI 540505 origin: China. cultivar: LUEDA. locality: Farmer's variety, Lueda-Place. Cultivar. Seed.
- PI 540506 origin: China. cultivar: CHINYON SULIHUNG. locality:
 Farmer's variety, Chinyon-Place. remarks: Sulihung means
 4 red seed. Cultivar. Seed.
- PI 540507 origin: China. cultivar: LUEDA SULIHUNG. locality:
 Farmer's variety, Lueda-Place. remarks: Sulihung means 4
 red seeds. Cultivar. Seed.
- PI 540508 origin: China. cultivar: INGKO SULIHUNG. locality: Farmer's variety, possible Ingko-Place. remarks: Sulihung means 4 red seed. Cultivar. Seed.
- PI 540509 to 540515. Sorghum bicolor (L.) Moench POACEAE Sorghum

 Donated by: Worker, G.F., P.O. Box 546, Julian, California, United States. Received April 16, 1990.

- PI 540509 origin: United States. cultivar: IV 702506. pedigree:
 Ryer 15x170793. remarks: Maturity 65 days to flowering
 (April planting). Plant height 140cm. Seed orange.
 Resistance to late summer disease complex in Yuma Valley,
 AZ, and Imperial Valley, CA. Spring Annual. Breeding
 Material. Seed.
- PI 540510 origin: United States. cultivar: IV 742382. pedigree:
 Ryer 15xPI 170793. remarks: Maturity 70 days to
 flowering (April planting). Plant height 135cm. Seed
 orange-brown. Resistance or tolerance to late summer
 disease complex in Yuma Valley, AZ, and Imperial Valley,
 CA. Spring Annual. Breeding Material. Seed.
- PI 540511 origin: United States. cultivar: IV 81409. pedigree:
 Head selection for red seed from Meloland. local name:
 Red Meloland. remarks: Maturity 70 days to flowering
 (April planting). Plant height 135cm. Seed red.
 Resistance to late summer disease complex in Yuma Valley
 AZ, and Imperial Valley, CA. Spring Annual. Breeding
 Material. Seed.
- PI 540512 origin: United States. cultivar: DOUBLE DWARF 38.

 pedigree: Selection from Dwarf Yellow Sooner. remarks:
 Maturity 61 days to flowering (April planting). Plant
 height 125cm. Seed orange. Spring Annual. Breeding
 Material. Seed.
- PI 540513 origin: United States. cultivar: DWARF IMPERIAL KAFIR. pedigree: Head selection from Imperial Kafir. remarks: Maturity 79 days to flowering (April planting). Plant height 130cm. Seed brown-red. Resistance or tolerance to late summer disease complex in Yuma Valley, AZ, and Imperial Valley, CA. Spring Annual. Breeding Material. Seed.
- PI 540514 origin: United States. cultivar: MELOLAND. pedigree:
 Imperial Kafir x Double Dwarf 38. other id: CV-112.
 source: Crop Sci. 12(3):395 1972. group: CSR-SORGHUM.
 remarks: Maturity 70 days to flowering (April planting).
 Plant height 135cm. Seed white-brown. High resistance to
 Anthracnose. Resistance to late summer disease complex in
 Yuma Valley, AZ and Imperial Valley, CA. Spring Annual.
 Breeding Material. Seed.
- PI 540515 origin: United States. cultivar: RYER 15. pedigree:
 Head selection from Double Dwarf 38. remarks: Maturity
 50 days to flowering (April planting). Plant height
 120cm. Seed orange. Spring Annual. Breeding Material.
 Seed.

- PI 540516 to 540549. Sorghum bicolor (L.) Moench POACEAE Sorghum
 - Donated by: Mazhani, L., Director of Agricultural Research, Private Bag 0033, Gaborone, Botswana. remarks: Received through Gary Odvody, Texas Agricultural Research Station, Corpus Christi. Received April 24, 1986.
 - PI 540516 origin: Botswana. cultivar: MARUPANTSE. other id: Qin 86-42. locality: Southern Botswana. Cultivar. Seed.
 - PI 540517 origin: Botswana. cultivar: TOWN. other id: Qin 86-43. locality: Southern Botswana. Cultivar. Seed.
 - PI 540518 origin: Botswana. cultivar: SEGAOLANE. other id: Qin 86-44. locality: Southern Botswana. Cultivar. Seed.
 - PI 540519 origin: Botswana. cultivar: KANYE STANDARD. other id: Qin 86-45. locality: Southern Botswana. Cultivar. Seed.
 - PI 540520 origin: South Africa. cultivar: SA47. other id: Qin 86-60. locality: Southern Botswana. Cultivar. Seed.
 - PI 540521 origin: South Africa. cultivar: SA264. other id: Qin 86-61. Cultivar. Seed.
 - PI 540522 origin: South Africa. cultivar: SA272. other id: 86-62. Cultivar. Seed.
 - PI 540523 origin: South Africa. cultivar: SA406. other id: 86-63. Cultivar. Seed.
 - PI 540524 origin: South Africa. cultivar: SA413. other id: 86-64. Cultivar. Seed.
 - PI 540525 origin: South Africa. cultivar: SA680. other id: 86-65. Cultivar. Seed.
 - PI 540526 origin: South Africa. cultivar: SA684. other id: 86-66. Cultivar. Seed.
 - PI 540527 origin: South Africa. cultivar: SA687. other id: 86-67. Cultivar. Seed.
 - PI 540528 origin: South Africa. cultivar: SA804. other id: 86-68. Cultivar. Seed.
 - PI 540529 origin: South Africa. cultivar: SA846. other id: 86-69. Cultivar. Seed.
 - PI 540530 origin: South Africa. cultivar: SA914. other id: 86-70. Cultivar. Seed.

PI 540516 to 540549-continued

- PI 540531 origin: South Africa. cultivar: SA917. other id: 86-71. Cultivar. Seed.
- PI 540532 origin: South Africa. cultivar: SA920. other id: 86-72. Cultivar. Seed.
- PI 540533 origin: South Africa. cultivar: SA921. other id: 86-73. Cultivar. Seed.
- PI 540534 origin: South Africa. cultivar: SA927. other id: 86-74. Cultivar. Seed.
- PI 540535 origin: South Africa. cultivar: SA945. other id: 86-75. Cultivar. Seed.
- PI 540536 origin: South Africa. cultivar: SA954. other id: 86-76. Cultivar. Seed.
- PI 540537 origin: South Africa. cultivar: SA969. other id: 86-77. Cultivar. Seed.
- PI 540538 origin: South Africa. cultivar: SA974. other id: 86-78. Cultivar. Seed.
- PI 540539 origin: South Africa. cultivar: SA979. other id: 86-79. Cultivar. Seed.
- PI 540540 origin: South Africa. cultivar: SA981. other id: 86-80. Cultivar. Seed.
- PI 540541 origin: South Africa. cultivar: SA1071. other id: 86-81. Cultivar. Seed.
- PI 540542 origin: South Africa. cultivar: SA1072. other id: 86-82. Cultivar. Seed.
- PI 540543 origin: South Africa. cultivar: SA1079. other id: 86-83. Cultivar. Seed.
- PI 540544 origin: South Africa. cultivar: SA1083. other id: 86-84. Cultivar. Seed.
- PI 540545 origin: South Africa. cultivar: SA1092. other id: 86-85. Cultivar. Seed.
- PI 540546 origin: South Africa. cultivar: SA1098. other id: 86-86. Cultivar. Seed.
- PI 540547 origin: South Africa. cultivar: SAlllo. other id: 86-87. Cultivar. Seed.

PI 540516 to 540549-continued

PI 540548 origin: South Africa. cultivar: SAlll3. other id: 86-88. Cultivar. Seed.

PI 540549 origin: South Africa. cultivar: SAll23. other id: 86-89. Cultivar. Seed.

PI 540550. Pennisetum glaucum (L.) R. Br. POACEAE Pearl millet

Donated by: Mazhani, L., Director of Agricultural Research, Private Bag 0033, Gaborone, Botswana. remarks: Received through Gary Odvody, Texas Agricultural Research Station, Corpus Christi. Received April 24, 1986.

origin: Botswana. cultivar: SERARE 6A. other id: Qin 86-46. locality: Southern Botswana. Cultivar. Seed.

PI 540551. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Cooper, R.L., Agricultural Research Service -- USDA, Dept. of Agronomy, Ohio State University, Wooster, Ohio, United States; and Ohio Agr. Res. & Dev. Ctr.. remarks: Hobbit Soybean. Received May 07, 1990.

origin: United States. origin institute: Agricultural Research Service -- USDA, Wooster, Ohio 44691. cultivar: Hobbit. pedigree: Williams x Ransom. other id: CV-266. source: Crop Sci. 31(1):231 1991. group: CSR-SOYBEAN. other id: PVP 8200174. source: Certificate in force. group: PVPO. other id: HW74-3385. source: Prior designation. remarks: Determinate semidwarf type. Maturity group III. Short stature. Highly resistant to lodging with high yield potential. Specific adaptation to high yield environments (>3300 kg/ha) where lodging frequently limits yields of taller cultivars. Should be solid-seeded in 17cm row width at 75 seeds/m2 for maximum yield. Annual. Cultivar. Seed.

PI 540552. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Cooper, R.L., Agricultural Research Service -- USDA, Dept. of Agronomy, Ohio State University, Wooster, Ohio, United States; and Ohio Agr. Res. & Dev. Ctr.. remarks: Hoyt Soybean. Received May 07, 1990.

PI 540552-continued

origin: United States. origin institute: Agricultural Research Service -- USDA, Wooster, Ohio 44691. cultivar: Hoyt. pedigree: Harcor x Elf. other id: CV-267. source: Crop Sci. 31(1):231 1991. group: CSR-SOYBEAN. other id: HC78-523. source: Prior designation. remarks: Determinate semidwarf type. Maturity group II. Short stature. Highly resistant to lodging with high yield potential. Specific adaptation to high yield environments (>3300 kg/ha) where lodging frequently limits yields of taller cultivars. Should be solid-seeded in 17cm row width at 75 seeds/m2 for maximum yield. Annual. Cultivar. Seed.

PI 540553. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Palmer, R.G., Agricultural Research Service -- USDA, Iowa State University, Ames, Iowa, United States; and Wyoming Agr. Exp. Sta.; and Asgrow Seed Co.. remarks: w4-m w4-m Soybean Genetic Stock. Received May 07, 1990.

origin: United States. origin institute: Agricultural Research Service -- USDA, Ames, Iowa 50011. cultivar: w4-m w4-m. pedigree: X1878/X2717. Line X2717 from cross Corsoy/Essex. Line X1878 from cross Amsoy 71/AG52109. other id: GS-2. source: Crop Sci. 30(6):1376 1990. group: CSR-SOYBEAN. other id: W4-mutable. other id: Asgrow Mutable. remarks: Maturity mid group II. Plant height medium. Growth habit interminate. Most plants chimeral for anthocyanin pigmentation. Mutable plants produce both near-white and purple flowers, as well as flowers of mutable phenotype with purple sectors on near white petals. Useful for developmental studies and for analysis of anthocyanin gene expression. Many new mutants have been isolated from the W4-. Spring Annual. Genetic Material. Seed.

PI 540554. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Nickell, C.D., Illinois Agr. Exp. Sta., University of Illinois, 1102 S. Goodwin Ave., Urbana, Illinois, United States. remarks: Bell Soybean. Received May 07, 1990.

origin: United States. origin institute: Illinois Agr. Exp. Sta., Urbana, Illinois 61801. cultivar: Bell. pedigree: Fayette x LN80-10398 LN80-10398 is a selection from Century x Land O Lakes Max. other id: CV-263. source: Crop Sci. 30(6):1364 1990. group: CSR-SOYBEAN. other id: PVP 9000172. source: Pending. group: PVPO. other id: LN85-874. source: Prior designation. remarks: Maturity group I (relative maturity 1.9). Flowers purple. Pubescence tawny. Pods tan at maturity. Seeds shiny yellow with black hila. Susceptible to phytophthora rot (races 1,4, and 7). Annual. Cultivar. Seed.

PI 540555. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Nickell, C.D., Illinois Agr. Exp. Sta., University of Illinois, 1102 S. Goodwin Ave., Urbana, Illinois, United States. remarks: Hamilton Soybean. Received May 07, 1990.

origin: United States. origin institute: Illinois Agr. Exp. Sta., Urbana, Illinois 61801. cultivar: Hamilton. pedigree: Sprite x L75-3632 L75-3632 is a selection from Corsoy (6) x Lee 68 and is a sister line to Corsoy 79. other id: CV-264. source: Crop Sci. 30(6):1364 1990. group: CSR-SOYBEAN. other id: PVP 9000170. source: Pending. group: PVPO. other id: LN82-2366. source: Prior designation. remarks: Maturity group IV (relative maturity 4.0). Flowers white. Pubescence gray. Pods brown at maturity. Seeds shiny yellow with buff hila. Susceptible to phytophthroa rot (races 1,4, and 7). Annual. Cultivar. Seed.

PI 540556. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Nickell, C.D., Illinois Agr. Exp. Sta., University of Illinois, 1102 S. Goodwin Ave., Urbana, Illinois, United States. remarks: Jack Soybean. Received May 07, 1990.

origin: United States. origin institute: Illinois Agr. Exp. Sta., Urbana, Illinois 61801. cultivar: Jack. pedigree: Fayette x Hardin. other id: CV-265. source: Crop Sci. 30(6):1365 1990. group: CSR-SOYBEAN. other id: PVP 9000171. source: Pending. group: PVPO. other id: LN83-3824-1. source: Prior designation. remarks: Maturity group II (relative maturity 2.9). Flowers white. Pubescence gray. Pods brown at maturity. Seeds dull yellow with yellow hila. Susceptible to phytophthora rot (races 1, 4, and 7). Annual. Cultivar. Seed.

- PI 540557 to 540559. Beta vulgaris var. macrocarpa (Guss.) Moq. CHENOPODIACEAE Sugarbeet
 - Donated by: Doney, D.L., Northern Crop Sci. Lab., USDA-ARS, North Dakota State University, P.O. Box 5677, Fargo, North Dakota, United States. remarks: Received through Sugarbeet Exploration in France, Belgium, and Denmark, August 1989. Received January 1990.
 - PI 540557 donor id: WB 820. origin: France. collected: August 10, 1989. collector id: WB 820. locality: Clay soil in garden, Andiran, Lot Et Garrone County. latitude: 43 deg. 80 min. N. longitude: 0 deg. 10 min. W. elevation: 100m. remarks: Plants mixed, segregating wild and vulgaris types, population of 50. Twenty-five plants sampled. Wild. Seed.
 - PI 540558 donor id: WB 821. origin: France. collected: August 10, 1989. collector id: WB 821. locality: Clay soil in vacant lot near new construction, Condom, Gers, County. latitude: 43 deg. 63 min. N. longitude: 0 deg. 01 min. W. elevation: 123m. remarks: Plants mixed, segregating wild and vulgaris types, population of 50. Twenty-five plants sampled. Wild. Seed.
 - PI 540559 donor id: WB 822. origin: France. collected: August 10, 1989. collector id: WB 822. locality: Clay soil in unkept gardens, near river, not in fields, S from Nerac, Lot Et Garrone County. latitude: 43 deg. 85 min. N. longitude: 0 deg. 02 min. W. elevation: 124m. remarks: Plants mixed, widespread, similar to 821. Population of 550. Over 100 plants sampled. Wild. Seed.
- PI 540560 to 540702. Beta vulgaris subsp. maritima (L.) Arcang. CHENOPODIACEAE Sugarbeet

Donated by: Doney, D.L., Northern Crop Sci. Lab., USDA-ARS, North Dakota State University, P.O. Box 5677, Fargo, North Dakota, United States. remarks: Received through Sugarbeet Exploration in France, Belgium, and Denmark, August 1989. Received January 1990.

PI 540560 donor id: WB 811. origin: France. collected: August 08, 1989. collector id: WB 811. locality: In grass, gravel, sandy soil, along road D570, .5km from Lec Bunas, Cumarque County. latitude: 43 deg. 30 min. N. longitude: 4 deg. 10 min. E. elevation: 5m. remarks: Plants single type, population of 8. Three plants sampled. Wild. Seed.

- PI 540561 donor id: WB 812. origin: France. collected: August 08, 1989. collector id: WB 812. locality: Sandy soil, .2km N of Arwa-Maries, Cumarque County. latitude: 43 deg. 18 min. N. longitude: 4 deg. 03 min. E. elevation: 5m. remarks: Plants variable, some segregation, very mature. Population of 500. More than 50 sampled. Susceptible to powdery mildew. Wild. Seed.
- PI 540562 donor id: WB 813. origin: France. collected: August 08, 1989. collector id: WB 813. locality: Silt soil along side of mud cliff, some at base of cliff on beach, road D37, Mas de Cabassale, Cumarque County. latitude: 43 deg. 28 min. N. longitude: 4 deg. 20 min. E. elevation: 0-2m. remarks: Plants variable, segregating habit, pigmentation. Population of 500. More than 100 sampled. Wild. Seed.
- PI 540563 donor id: WB 814. origin: France. collected: August 09, 1989. collector id: WB 814. locality: Sandy soil along road by beach, .5km from route D14, LePanant, Cumarque County. latitude: 43 deg. 27 min. N. longitude: 3 deg. 80 min. E. elevation: 2m. remarks: Plants single type, very erect, quite vigorous. Population of 50. Forty plants sampled. Susceptible to powdery mildew. Wild. Seed.
- PI 540564 donor id: WB 815. origin: France. collected: August 09, 1989. collector id: WB 815. locality: Sandy soil on side of parking lot, .5km E from castle, N on road behind beach, DeMaguelone, Herault County. latitude: 43 deg. 22 min. N. longitude: 3 deg. 61 min. E. elevation: lm. remarks: Plants single type, large erect plants. Population of 20. Twenty plants sampled. Wild. Seed.
- PI 540565 donor id: WB 816. origin: France. collected: August 09, 1989. collector id: WB 816. locality: Sandy soil, open field E of road toward beach, k .5km from sea. South East of Mobil refinery, Frontignan, Herault County. latitude: 43 deg. 14 min. N. longitude: 3 deg. 44 min. E. elevation: lm. remarks: Plants variable, upright, segregating pigment in open field. Population of 20. Fifteen plants sampled. Wild. Seed.
- PI 540566 donor id: WB 817. origin: France. collected: August 09, 1989. collector id: WB 817. locality: Sandy soil, along both sides of road D32 along canal, La-Grau-d'Agde, Herault County. latitude: 43 deg. 17 min. N. longitude: 3 deg. 27 min. E. elevation: lm. remarks: Plants variable, sparsely scattered, most erect, one procumbent. Population of 25. Twenty plants sampled. Wild. Seed.

- PI 540567 donor id: WB 818. origin: France. collected: August 09, 1989. collector id: WB 818. locality: Sandy soil, D168 N of harbor, Narbonne-Plage, Aude County. latitude: 43 deg. 10 min. N. longitude: 3 deg. 11 min. E. elevation: lm. remarks: Plants single type, sparsely scattered, trampled and little seed. Population of 20. Eight plants sampled. Wild. Seed.
- PI 540568 donor id: WB 819. origin: France. collected: August 09, 1989. collector id: WB 819. locality: On both sides of road D627, gravel, N of Leucate by inlet bay, Aude County. latitude: 42 deg. 54 min. N. longitude: 3 deg. 25 min. E. elevation: lm. remarks: Plants mixed, variable, segrating pigmentation habit, Population of more than 500. More than 100 plants sampled. Wild. Seed.
- PI 540569 donor id: WB 823. origin: France. collected: August 11, 1989. collector id: WB 823. locality: On N end of beach, sparsely scattered in limestone boulders, 2.5km N of St. Jean-De-Luz, Xibau Berria, Eromardie, Pyrennees Atlantiques County. latitude: 43 deg. 25 min. N. longitude: 1 deg. 38 min. W. elevation: lm. remarks: Plants single type, similar to United Kingdom maritima, population of 15. Ten plants sampled. Perennial. Wild. Seed.
- PI 540570 donor id: WB 824. origin: France. collected: August 11, 1989. collector id: WB 824. locality: In rocks, off road D79 at high tide, Lake d'Hossegor, Hossegor, Pyrennees Atlantiques County. latitude: 43 deg. 41 min. N. longitude: 1 deg. 26 min. W. elevation: .5m. remarks: Plants variable, leaves thick, stems old dry, seed young immature. Population of 15. Ten plants sampled. Perennial. Wild. Seed.
- PI 540571 donor id: WB 825. origin: France. collected: August 12, 1989. collector id: WB 825. locality: Clay soil in rocks, cobbles and sand around lake, Port d'Albrot near Vieux-Boucau, Landes County. latitude: 43 deg. 48 min. N. longitude: 1 deg. 25 min. W. elevation: .5m. remarks: Plants single type, far apart no intercrossing, poor seed. Population of 5. Four plants sampled. Wild. Seed.
- PI 540572 donor id: WB 826. origin: France. collected: August 12, 1989. collector id: WB 826. locality: Sandy soil, 1km from Mimizan Beach, up mouth of river, Landes County. latitude: 44 deg. 14 min. N. longitude: 1 deg. 17 min. W. elevation: 1m. remarks: Plants single type, only one plant, little seed set, some monogerm. Wild. Seed.

- PI 540573 donor id: WB 827. origin: France. collected: August 12, 1989. collector id: WB 827. locality: Sandy soil, in vacant lot around harbor, Port deCassy, Cassy, Gironde County. latitude: 44 deg. 43 min. N. longitude: 1 deg. 04 min. W. elevation: lm. remarks: Plants variable, mostly upright, segregating pigmentation. Population over 500. Thirty plants sampled. Wild. Seed.
- PI 540574 donor id: WB 828. origin: France. collected: August 19, 1989. collector id: WB 828. locality: Sandy soil, next to south beach, along fence, Les-Batns, Andernos, Gironde County. latitude: 44 deg. 44 min. N. longitude: 1 deg. 05 min. W. elevation: 2m. remarks: Plants variable, cut several times, population over 500. Twenty-four plants sampled. Wild. Seed.
- PI 540575 donor id: WB 829. origin: France. collected: August 13, 1989. collector id: WB 829. locality: Sandy soil, along boat docks, limestone from oyster beds, N of oyster port, Andernons Les-Bains, Gironde County. latitude: 44 deg. 45 min. N. longitude: 1 deg. 06 min. W. elevation: 2m. remarks: Plants variable, population over 500, 35 plants sampled. Susceptible to leaf spot. Wild. Seed.
- PI 540576 donor id: WB 830. origin: France. collected: August 13, 1989. collector id: WB 830. locality: Sandy soil, around old oyster harbor, N at LeFour, Les Jacquets, Gironde County. latitude: 44 deg. 44 min. N. longitude: 1 deg. 11 min. W. elevation: 2m. remarks: Plants variable, population of 50, 12 plants sampled. Susceptible to leaf spot, one plant to mildew. Wild. Seed.
- PI 540577 donor id: WB 831. origin: France. collected: August 14, 1989. collector id: WB 831. locality: Sandy soil, N of Port, Pauiliac, Gironde County. latitude: 44 deg. 89 min. N. longitude: 0 deg. 96 min. W. elevation: 2m. remarks: Plants variable, few scattered N of port, some like SB, one with momogerm, one with mosaic virus. Population of 100. Forteen plants sampled. Wild. Seed.
- PI 540578 donor id: WB 832. origin: France. collected: August 14, 1989. collector id: WB 832. locality: Sandy soil, above mud and reeds behind yards, at port, LaMarechale, Gironde County. latitude: 45 deg. 01 min. N. longitude: 0 deg. 98 min. W. elevation: 2m. remarks: Plants variable, seed good, population of more than 550. Forty-two plants sampled. Susceptible to leaf spot and mildew. Wild. Seed.

- PI 540579 donor id: WB 833. origin: France. collected: August 14, 1989. collector id: WB 833. locality: Sandy soil, along boat dock, 3km N of Port de Goulee, Vaeyrac, Gironde County. latitude: 45 deg. 26 min. N. longitude: 0 deg. 55 min. W. elevation: 2m. remarks: Plants variable, large, population of 30, 15 plants sampled. Susceptible to leaf spot. Wild. Seed.
- PI 540580 donor id: WB 834. origin: France. collected: August 14, 1989. collector id: WB 834. locality: In cobbles and rock sea wall, 5km E on beach, St-Vivien-de-Medoc, Gironde County. latitude: 45 deg. 29 min. N. longitude: 1 deg. 00 min. W. elevation: 1m. remarks: Plants variable, most erect but some procumbent, very vigorous. Segregating pigmentation, some large 9 multigerm, leaf spot. Population of more than 500. Thirty-nine plants sampled. Wild. Seed.
- PI 540581 donor id: WB 835. origin: France. collected: August 14, 1989. collector id: WB 835. locality: Clay and sandy soil, above rocks, below path, N to LaGrande Cote, Royan, Charente Maritime County. latitude: 45 deg. 39 min. N. longitude: 1 deg. 07 min. W. elevation: 5m. remarks: Plants variable, segregating pigmentation very large 2 & 3 germ seed. Population of 100. Twenty-six plants sampled. Wild. Seed.
- PI 540582 donor id: WB 836. origin: France. collected: August 15, 1989. collector id: WB 836. locality: Clay and sandy soil, around oyster beds, Prise de Treibois, near la Tremblade les Brandes, Charente Maritime County. latitude: 45 deg. 48 min. N. longitude: 1 deg. 09 min. W. elevation: 5m. remarks: Plants variable, grows well in oyster shells, seed large. Segregating pigmentation. Population of more than 500. Twenty-eight plants sampled. Wild. Seed.
- PI 540583 donor id: WB 837. origin: France. collected: August 15, 1989. collector id: WB 837. locality: Clay soil with cobbles, around point in cliff, at base and on top, Point de Chassiron, St-Denis-d' Oleron, Charente Maritime County. latitude: 46 deg. 03 min. N. longitude: 1 deg. 24 min. W. elevation: 5m. remarks: Plants variable, leaves fine, segregating pigmentation and seed size. Population of more than 500. Forty-one plants sampled. Wild. Seed.

- PI 540584 donor id: WB 838. origin: France. collected: August 15, 1989. collector id: WB 838. locality: Growing in rocks, cobbles along north-facing mouth of canal, 3km SE of port, Labree-Les Bains, Charente Maritime County. latitude: 46 deg. 00 min. N. longitude: 1 deg. 19 min. W. elevation: .5m. remarks: Plants variable, two small groups, population of 25, and 8 sampled. Wild. Seed.
- PI 540585 donor id: WB 839. origin: France. collected: August 15, 1989. collector id: WB 839. locality: Sandy soil, vacant lot of Mr. Baracci, Leclerc Street, La-Cotiniere, Charente Maritime County. latitude: 45 deg. 55 min. N. longitude: 1 deg. 20 min. W. elevation: 2m. remarks: Plants variable, large, erect. Population of more than 500. Forty-two plants sampled. Susceptible to leaf spot. Wild. Seed.
- PI 540586 donor id: WB 840. origin: France. collected: August 15, 1989. collector id: WB 840. locality: Sandy soil around oyster bed, in oyster shells, N of port, St. Trojan-Les Bains, Charente Maritime County. latitude: 45 deg. 51 min. N. longitude: 1 deg. 12 min. W. elevation: 2m. remarks: Plants variable, population of more than 500, 42 sampled. Susceptible to leaf spot. Wild. Seed.
- PI 540587 donor id: WB 841. origin: France. collected: August 15, 1989. collector id: WB 841. locality: Gravel soil on beach, in oyster shells, Point de L'Accenston, Bourcefrance-Le-Chapus, Charente Maritime County. latitude: 45 deg. 51 min. N. longitude: 1 deg. 10 min. W. elevation: 1m. remarks: Plants variable, segregating pigmentation, some very red. Population more than 500. Forty-eight plants sampled. Wild. Seed.
- PI 540588 donor id: WB 842. origin: France. collected: August 15, 1989. collector id: WB 842. locality: Clay and sandy soil around mussell beds between fort and canal. Brouage, 2km W of St. Agnant, Charente Maritime County. latitude: 43 deg. 52 min. N. longitude: 1 deg. 04 min. W. elevation: 2m. remarks: Plants variable, population of more than 500, 42 plants sampled. Wild. Seed.
- PI 540589 donor id: WB 843. origin: France. collected: August 16, 1989. collector id: WB 843. locality: Sandy soil, in vacant lot up from mussell beds, Les Boucholeurs, 2km S of Chatelaillon Plage, Charente Maritime County. latitude: 46 deg. 03 min. N. longitude: 1 deg. 05 min. W. elevation: 2m. remarks: Plants variable, erect, population of 25, 16 sampled. Wild. Seed.

- PI 540590 donor id: WB 844. origin: France. collected: August 16, 1989. collector id: WB 844. locality: Along topof rocks above oyster beds, 2km E of Ile-De-Re' la Fiotte, Charente Maritime County. latitude: 46 deg. 10 min. N. longitude: 1 deg. 17 min. W. elevation: 2m. remarks: Plants variable, seeds large, open caps. Population of 100. Forty plants sampled. Susceptible to mildew. Wild. Seed.
- PI 540591 donor id: WB 845. origin: France. collected: August 16, 1989. collector id: WB 845. locality: In limestone shingle on beach, lkm S of Point-Du-Grouin, Ile-De-Re' Loix-Bel-Air, Charente Maritime County. latitude: 46 deg. 13 min. N. longitude: 1 deg. 25 min. W. elevation: lm. remarks: Plants variable, prostrate, segregating pigmentation, open seed cap. Population of more than 500. Thirty-three plants sampled. Wild. Seed.
- PI 540592 donor id: WB 846. origin: France. collected: August 16, 1989. collector id: WB 846. locality: Clay and cobble stone soil, in cracks of sea wall, grass, and sand behind sea wall, Point-Pas-du-Chaume, Ils-De-Re' Plane-des-Baleines near lighthouse, Charente Maritime County. latitude: 46 deg. 12 min. N. longitude: 1 deg. 34 min. W. elevation: 1-2m. remarks: Plants variable, erect, one very red, segregating pigmentation. Population of more than 500. Forty-one plants sampled. Susceptible to mildew. Wild. Seed.
- PI 540593 donor id: WB 847. origin: France. collected: August 16, 1989. collector id: WB 847. locality: In gravel at base of sandstone cliff, 2km W of Point St. Clement, Esnandes, Charente Maritime County. latitude: 46 deg. 14 min. N. longitude: 1 deg. 07 min. W. elevation: lm. remarks: Plants variable, seed large, seregating habit, pigmentation. Population of more than 500. Forty-five plants sampled. Wild. Seed.
- PI 540594 donor id: WB 848. origin: France. collected: August 16, 1989. collector id: WB 848. locality: Silt soil, on side of river where D9 crosses, Charron, Charente Maritime County. latitude: 46 deg. 18 min. N. longitude: 1 deg. 05 min. W. elevation: 1m. remarks: Plants variable, appearance same as 847. Population of more than 500. Twenty plants sampled. Wild. Seed.

- PI 540595 donor id: WB 849. origin: France. collected: August 16, 1989. collector id: WB 849. locality: Silt soil, 1km W where canal crosses D105, Marans, Charente Maritime County. latitude: 46 deg. 18 min. N. longitude: 1 deg. 01 min. W. elevation: 3m. remarks: Plants single type, large, erect, green, appearance of vulgaris, some with deeper color. Population of 50. Sisteen plants sampled. Wild. Seed.
- PI 540596 donor id: WB 850. origin: France. collected: August 17, 1989. collector id: WB 850. locality: Clay and silt soil behind homes near marsh of esturary, beach at inlet, L'Aiguillon-Sur-Mer, Vendee County. latitude: 46 deg. 20 min. N. longitude: 1 deg. 17 min. W. elevation: 1-2m. remarks: Plants variable, large, segregating erect pigmentation. Population of 500. Thirty-five plants sampled. Wild. Seed.
- PI 540597 donor id: WB 851. origin: France. collected: August 17, 1989. collector id: WB 851. locality: Clay and silt soil, fodder beet field close, 4.5km S of le Port, Talmont-St-Hilaire, Vendee County. latitude: 46 deg. 25 min. N. longitude: l deg. 30 min. W. elevation: 1-2m. remarks: Plants variable, large, erect, segregating pigmentation, one group prostrate. Population of more than 500. Thirty-nine plants sampled. Wild. Seed.
- PI 540598 donor id: WB 852. origin: France. collected: August 17, 1989. collector id: WB 852. locality: Silt, gravel soil, in rocks above high tide along estuary, E side of bridge, Les-Sableg-d'Olonne, Vendee County. latitude: 46 deg. 30 min. N. longitude: 1 deg. 47 min. W. elevation: lm. remarks: Plants variable, mostly erect, segregating pigmentation. Population of more than 500. Thirty-one sampled. Wild. Seed.
- PI 540599 donor id: WB 853. origin: France. collected: August 17, 1989. collector id: WB 853. locality: Clay and sandy soil above cliff, beach, Brettgnolles-Sur-Mer, Vendee County. latitude: 46 deg. 38 min. N. longitude: 1 deg. 52 min. W. elevation: 8m. remarks: Plants variable, population of more than 100, 28 sampled. Wild. Seed.
- PI 540600 donor id: WB 854. origin: France. collected: August 17, 1989. collector id: WB 854. locality: Sandy, silt soil around oyster beds and along inside of stone sea wall, Port du Bonhomme, Ile-De-Noir-Moutier, La-Gueriniere, Vendee County. latitude: 46 deg. 88 min. N. longitude: 2 deg. 13 min. W. elevation: 2m. remarks: Plants variable, very large, mostly erect. Population of more than 500. Forty-two plants sampled. Wild. Seed.

- PI 540601 donor id: WB 855. origin: France. collected: August 17, 1989. collector id: WB 855. locality: In clay soil, hanging over rock wall on beach, 2km N of Madeleine, Ile-De-Noir-Moutier, Vendee County. latitude: 47 deg. 01 min. N. longitude: 2 deg. 16 min. W. elevation: lm. remarks: Plants variable, very large, procument to erect, segregating pigmentation. Population of more than 500. Thirty-five sampled. Wild. Seed.
- PI 540602 donor id: WB 856. origin: France. collected: August 18, 1989. collector id: WB 856. locality: Clay soil along bank of canal at Port-du-Collet, 2km S of Bourgnuf-En-Retz, Loire-Atlantique County. latitude: 47 deg. 01 min. N. longitude: 1 deg. 58 min. W. elevation: 1m. remarks: Plants variable, very erect, population of 100. Twenty-nine sampled. Wild. Seed.
- PI 540603 donor id: WB 857. origin: France. collected: August 18, 1989. collector id: WB 857. locality: On top of rock cliffs, Sablons beach, Pornic at Ste-Mairie, Loire-Atlantique County. latitude: 47 deg. 07 min. N. longitude: 2 deg. 08 min. W. elevation: 10-12m. remarks: Plants variable, three small groups, segregating seed size. Population of 30. Twelve plants sampled. Wild. Seed.
- PI 540604 donor id: WB 858. origin: France. collected: August 18, 1989. collector id: WB 858. locality: In gravel and silt soil along bank above rocks, N side from Point-De St-Gildas, Loire-Atlantique County. latitude: 47 deg. 08 min. N. longitude: 2 deg. 15 min. W. elevation: 1-2m. remarks: Plants variable, segregating pigmentation habit and seed size. Population of more than 500. Twenty-nine plants sampled. Wild. Seed.
- PI 540605 donor id: WB 859. origin: France. collected: August 18, 1989. collector id: WB 859. locality: Sandy silt soil along top of rock sea wall, 3km S of Roussellonier beach, St-Brevin-Les-oins, Loire-Atlantique County. latitude: 47 deg. 12 min. N. longitude: 2 deg. 09 min. W. elevation: 2m. remarks: Plants variable, large, mostly procument, population of more than 100. Thirty-three plants sampled. Wild. Seed.
- PI 540606 donor id: WB 860. origin: France. collected: August 18, 1989. collector id: WB 860. locality: Clay soil E of hospital along river, by bridge, St-Brevin-Les-Pins Minden, Loire-Atlantique County. latitude: 47 deg. 14 min. N. longitude: 2 deg. 09 min. W. elevation: 2-3m. remarks: Plants variable, large, mostly procument, population of more than 50. Thirty plants sampled. Wild. Seed.

- PI 540607 donor id: WB 861. origin: France. collected: August 17, 1989. collector id: WB 861. locality: Clay soil with cobbles along banks above rocks, 15km NW of beach, Piriac-st-Nazaire, Loire-Atlantique County. latitude: 47 deg. 23 min. N. longitude: 2 deg. 32 min. W. elevation: 2-3m. remarks: Plants variable, poor seed set, few beets, self-sterile, seeds small, few scattered. Population of 30. Twenty plants sampled. Wild. Seed.
- PI 540608 donor id: WB 862. origin: France. collected: August 19, 1989. collector id: WB 862. locality: Acid soil with cobbles, scattered along rocky beach, Port Blanc, 10km SW of Yannes, Morbihan County. latitude: 47 deg. 36 min. N. longitude: 2 deg. 52 min. W. elevation: 1-3m. remarks: Plants variable, poor seed set, seeds small, very viney. Population of 50. Twenty-eight sampled. Wild. Seed.
- PI 540609 donor id: WB 863. origin: France. collected: August 19, 1989. collector id: WB 863. locality: Gravel soil, Etel Beach, 10km S E of Lorient, Morbihan County. latitude: 47 deg. 40 min. N. longitude: 3 deg. 10 min. W. elevation: 1-3m. remarks: Plants variable, scattered with very poor seed set (one very good, one next to it poor seed set), poor seed set associated with dark-prostrate. Population of more than 100. Twenty-six plants sampled. Wild. Seed.
- PI 540610 donor id: WB 864. origin: France. collected: August 19, 1989. collector id: WB 864. locality: Rocky, clay and sandy soil above bare rock, Raquenez Beach, 10km SW of Pont-Aven, Finistere County. latitude: 47 deg. 47 min. N. longitude: 3 deg. 48 min. W. elevation: 15-18m. remarks: Plants variable, segregating pigmentation, some very prostrate and red. Population of more than 500. Thirty-six sampled. Wild. Seed.
- PI 540611 donor id: WB 865. origin: France. collected: August 20, 1989. collector id: WB 865. locality: Scattered in rocks, 15km S of Fousenant, Quimper at Beg-Meil, Finistere County. latitude: 47 deg. 51 min. N. longitude: 3 deg. 59 min. W. elevation: 3-5m. remarks: Plants variable, population of 14. Eight plants sampled. Wild. Seed.

- PI 540612 donor id: WB 866. origin: France. collected: August 20, 1989. collector id: WB 866. locality: Clay soil with cobbles, N of lighthouse, 14km SW of Point-1'Abbe. Point de Penmarch, Finistere County. latitude: 47 deg. 47 min. N. longitude: 4 deg. 25 min. W. elevation: 1-2m. remarks: Plants variable, segregation erect pigmentation, population of more than 500. Forty-two sampled. Wild. Seed.
- PI 540613 donor id: WB 867. origin: France. collected: August 20, 1989. collector id: WB 867. locality: Clay and sandy soil, Penhors Beach, 22km W of Quimper, Finistere County. latitude: 47 deg. 56 min. N. longitude: 4 deg. 24 min. W. elevation: 3-5m. remarks: Plants variable, very prostrate, population of more than 500. Fifty plants sampled. Wild. Seed.
- PI 540614 donor id: WB 868. origin: France. collected: August 20, 1989. collector id: WB 868. locality: Clay soil along bank, some in water at high tide, Port Rhu River, Douarnenez, Finistere County. latitude: 48 deg. 05 min. N. longitude: 4 deg. 20 min. W. remarks: Plants variable, population of 25, 8 plants sampled. Wild. Seed.
- PI 540615 donor id: WB 869. origin: France. collected: August 21, 1989. collector id: WB 869. locality: Scattered in rocks above high tide S end of beach, 15km SE of Crozon, 3km S of Teigruc, Finistere County. latitude: 48 deg. 13 min. N. longitude: 4 deg. 21 min. W. elevation: lm. remarks: Plants variable, population of 50, 34 sampled. Susceptible to rust. Wild. Seed.
- PI 540616 donor id: WB 870. origin: France. collected: August 21, 1989. collector id: WB 870. locality: North river bank, in gravel, covered by previous night's high tide, Lefaou, Finistere County. latitude: 48 deg. 18 min. N. longitude: 4 deg. 11 min. W. remarks: Plants variable, population of more than 500, 37 sampled. Wild. Seed.
- PI 540617 donor id: WB 871. origin: France. collected: August 21, 1989. collector id: WB 871. locality: In rocks, 10-year-oil slick still evident on rocks, Point Minou, 5km SW of Brest, Finistere County. latitude: 48 deg. 20 min. N. longitude: 4 deg. 36 min. W. elevation: 1-5m. remarks: Plants variable, very viney, population of more than 500. Thirty-three plants sampled. Wild. Seed.

- PI 540618 donor id: WB 872. origin: France. collected: August 21, 1989. collector id: WB 872. locality: In rocks at and above tide, Argenton, 16km NW of St. Renan, Finistere County. latitude: 48 deg. 31 min. N. longitude: 4 deg. 45 min. W. elevation: 1-3m. remarks: Plants variable, segregating seed size, pigmentation, very prostrate. Population of more than 100. Thirty plants sampled. Wild. Seed.
- PI 540619 donor id: WB 873. origin: France. collected: August 21, 1989. collector id: WB 873. locality: Soil clay with cobbles, lkm N of Guisseny, Finistere County. latitude: 48 deg. 38 min. N. longitude: 4 deg. 24 min. W. elevation: 1-2m. remarks: Plants variable, one very large, one monogerm, some 8-germ, many large plants, seed good. Population more than 500. Forty-four plants sampled. Wild. Seed.
- PI 540620 donor id: WB 874. origin: France. collected: August 21, 1989. collector id: WB 874. locality: Silt soil with cobbles, 1,5km N of Sibiril, Finistere County. latitude: 48 deg. 41 min. N. longitude: 4 deg. 06 min. W. remarks: Plants variable, many large plants, most seed either shattered or young. Population of more than 500. Twenty-three plants sampled. Wild. Seed.
- PI 540621 donor id: WB 875. origin: France. collected: August 22, 1989. collector id: WB 875. locality: In rocks, 1 km N of Plougasnou, Primel-Tregastel, Finistere County. latitude: 48 deg. 43 min. N. longitude: 3 deg. 49 min. W. elevation: lm. remarks: Plants variable, some good seed. Population of more than 500. Thirty-nine sampled. Wild. Seed.
- PI 540622 donor id: WB 876. origin: France. collected: August 22, 1989. collector id: WB 876. locality: Clay soil in cobbles, de Goaz Trez Beach, Trebeurden, Cotes Du Nord County. latitude: 48 deg. 47 min. N. longitude: 3 deg. 35 min. W. elevation: 1-2m. remarks: Plants variable, seed good, some very red, segregating pigmentation. Population of more than 500. Fifty-one sampled. Wild. Seed.
- PI 540623 donor id: WB 877. origin: France. collected: August 22, 1989. collector id: WB 877. locality: Clay soil with cobbles, along N end of beach, Trevou-Treguignec, Trestel, Cotes Du Nord County. latitude: 48 deg. 49 min. N. longitude: 3 deg. 21 min. W. elevation: 1-2m. remarks: Plants variable, some very large plants. Seeds large. Population of more than 500. Forty-five plants sampled. Wild. Seed.

- PI 540624 donor id: WB 878. origin: France. collected: August 22, 1989. collector id: WB 878. locality: Soil with cobbles, E and W of harbor, Ile-De-Brehat, Cotes De Nord County. latitude: 48 deg. 51 min. N. longitude: 3 deg. 00 min. W. elevation: 1-5m. remarks: Plants variable, population of more than 500, 35 plants sampled. Wild. Seed.
- PI 540625 donor id: WB 879. origin: France. collected: August 23, 1989. collector id: WB 879. locality: Soil with cobbles, in cove around point from harbor, Port-De-Houet, 5km N of Val-Andre, Cotes-Du-Nord County. latitude: 48 deg. 32 min. N. longitude: 2 deg. 32 min. W. elevation: 3-8m. remarks: Plants variable, segregation pigmentation, seed poor on red plants. Population of 75. Twenty-six plants sampled. Wild. Seed.
- PI 540626 donor id: WB 880. origin: France. collected: August 23, 1989. collector id: WB 880. locality: Soil with cobbles, on S end of beach, Pleherel-Plage, Veiux-Bourg, Cotes Du Nor County. latitude: 48 deg. 39 min. N. longitude: 2 deg. 22 min. W. elevation: 2m. remarks: Plants variable, some with long internodes, seeds large. Population of 20. Eleven plants sampled. Wild. Seed.
- PI 540627 donor id: WB 881. origin: France. collected: August 23, 1989. collector id: WB 881. locality: Silt soil with cobbles, mostly on NE of bridge, 5km E of Matignon at Notre Dame du-Guildo, Cotes Du Nord County. latitude: 48 deg. 34 min. N. longitude: 2 deg. 11 min. W. elevation: 1-2m. remarks: Plants variable, population of 50, 27 plants sampled. Wild. Seed.
- PI 540628 donor id: WB 882. origin: United Kingdom. collected:
 August 24, 1989. collector id: WB 882. locality: Soil
 with cobbles, at two places, most at Beau Port and west
 end of St. Brelades Bay, Jersey Island. latitude: 49
 deg. ll min. N. longitude: 2 deg. ll min. W.
 elevation: 5-7m. remarks: Plants variable, population of
 more than 500, 45 plants sampled. Susceptible to mildew.
 Wild. Seed.
- PI 540629 donor id: WB 883. origin: United Kingdom. collected:
 August 24, 1989. collector id: WB 883. locality: Rocky soil, Point Etaquerel, L'Etacq, Jersey Island. latitude:
 49 deg. 13 min. N. longitude: 2 deg. 12 min. W. elevation: 1-2m. remarks: Plants variable, seed good, segregating pigmentation habit. Population of more than 500. Fifty-three plants sampled. Wild. Seed.

- PI 540630 donor id: WB 884. origin: United Kingdom. collected:
 August 24, 1989. collector id: WB 884. locality: Soil
 with cobbles, Bonne Nuit bay, Jersey Island. latitude:
 49 deg. 13 min. N. longitude: 2 deg. 06 min. W.
 elevation: 1-3m. remarks: Plants variable, large,
 segregating pigmentation. seed size. Population of more
 than 500. Thirty-three plants sampled. Wild. Seed.
- PI 540631 donor id: WB 885. origin: United Kingdom. collected:
 August 24, 1989. collector id: WB 885. locality: Clay
 soil with cobbles, only on man-made stone wall, S of St.
 Catherine's Bay, Jersey Island. latitude: 49 deg. 12
 min. N. longitude: 2 deg. 02 min. W. elevation: 2m.
 remarks: Plants variable, population of 15. Twelve plants
 sampled. Wild. Seed.
- PI 540632 donor id: WB 886. origin: United Kingdom. collected:
 August 24, 1989. collector id: WB 886. locality: Clay
 soil around tower, Les Nez Point, St. Clement's Bay,
 Jersey Island. latitude: 49 deg. 10 min. N. longitude:
 2 deg. 03 min. W. elevation: 2m. remarks: Plants
 variable, population of more than 500, trampled and
 little seed. Eleven plants sampled. Wild. Seed.
- PI 540633 donor id: WB 887. origin: United Kingdom. collected:
 August 25, 1989. collector id: WB 887. locality: In
 cove above hight tide in rocks, Moulin Huet Bay, Guernsey
 Island. latitude: 49 deg. 27 min. N. longitude: 2
 deg. 26 min. W. elevation: 2m. remarks: Plants
 variable, population of 80, 22 sampled. Wild. Seed.
- PI 540634 donor id: WB 888. origin: United Kingdom. collected:
 August 25, 1989. collector id: WB 888. locality: In
 rocks around cove, Rocquaine Bay, Guernsey Island.
 latitude: 49 deg. 28 min. N. longitude: 2 deg. 27 min.
 W. elevation: 2-4m. remarks: Plants variable,
 population of more than 100, 41 plants sampled. Wild.
 Seed.
- PI 540635 donor id: WB 889. origin: United Kingdom. collected:
 August 25, 1989. collector id: WB 889. locality: In
 rocks and sand, Cobo bay, Guernsey Island. latitude: 49
 deg. 28 min. N. longitude: 2 deg. 25 min. W.
 elevation: 2-4m. remarks: Plants variable, population of
 more than 500, 38 plants sampled. Wild. Seed.

- PI 540636 donor id: WB 890. origin: France. collected: August 26, 1989. collector id: WB 890. locality: Soil with cobbles, S of bridge, 15km W of Dol le-Port St. Jean, Ille-Et-Vilaine County. latitude: 48 deg. 32 min. N. longitude: 1 deg. 58 min. W. elevation: lm. remarks: Plants variable, segregating pigmentation, habit, seed size small. Population of more than 500. Forty plants sampled. Wild. Seed.
- PI 540637 donor id: WB 891. origin: France. collected: August 26, 1989. collector id: WB 891. locality: Along rocks and gravel, 1 S of bridge, LaGouonnais, Ille-Et-Vilaine County. latitude: 48 deg. 37 min. N. longitude: 2 deg. 02 min. W. elevation: lm. remarks: Plants variable, population of 50, 18 plants sampled. Wild. Seed.
- PI 540638 donor id: WB 892. origin: France. collected: August 26, 1989. collector id: WB 892. locality: Silt soil, many plants in sand under cyprus trees, at neck connecting isle to bay, Ile Besnard, Ille-Et-Vilaine County. latitude: 48 deg. 42 min. N. longitude: 1 deg. 57 min. W. elevation: 2m. remarks: Plants variable, one monogerm with seed in clusters, segregating pigmentation and habit. Population of more than 500. Fifty-seven plants sampled. Wild. Seed.
- PI 540639 donor id: WB 893. origin: France. collected: August 24, 1989. collector id: WB 893. locality: In rocks above high tide, N of beach, 4km N of Port Mer, Cancale, Ille-Et-Vilaine County. latitude: 48 deg. 43 min. N. longitude: 1 deg. 49 min. W. elevation: 2m. remarks: Plants variable, population of 100. Thirty-three plants sampled. Wild. Seed.
- PI 540640 donor id: WB 894. origin: France. collected: August 26, 1989. collector id: WB 894. locality: In rocks along road to abby, Le Mont-St-Michel, Manche County. latitude: 48 deg. 38 min. N. longitude: 1 deg. 29 min. W. elevation: lm. remarks: Plants variable, population of 500. Twenty-seven plants sampled. Wild. Seed.
- PI 540641 donor id: WB 895. origin: France. collected: August 27, 1989. collector id: WB 895. locality: Silt soil, only around road entrance and fence, Le-Gue-de-l'Epine, 4km S of Avranches, Manche County. latitude: 48 deg. 39 min. N. longitude: l deg. 24 min. W. elevation: lm. remarks: Plants variable, few seeds. Population of 50. Twenty-two plants sampled. Wild. Seed.

- PI 540642 donor id: WB 896. origin: France. collected: August 27, 1989. collector id: WB 896. locality: Silt soil, S at bridge Genets, Manche County. latitude: 48 deg. 41 min. N. longitude: 1 deg. 28 min. W. elevation: 2m. remarks: Plants single type, very large upright, very large brac's, reverting vegetative. Population of 15. Eleven plants sampled. Wild. Seed.
- PI 540643 donor id: WB 897. origin: France. collected: August 27, 1989. collector id: WB 897. locality: In rocks on S of beach, Carolles Plage, 1.5km S of Jullouville, Manche County. latitude: 48 deg. 45 min. N. longitude: 1 deg. 35 min. W. elevation: 2-5m. remarks: Plants single type, population of 25. Eleven plants sampled. Wild. Seed.
- PI 540644 donor id: WB 898. origin: France. collected: August 27, 1989. collector id: WB 898. locality: Silt soil, only in spot close to water, sandy beach and sand dunes, Coudeville Plage, 2km W of Coudeville, Manche County. latitude: 48 deg. 54 min. N. longitude: 1 deg. 35 min. W. elevation: 2m. remarks: Plants single type, population of 6. Four plants sampled. Wild. Seed.
- PI 540645 donor id: WB 899. origin: France. collected: August 27, 1989. collector id: WB 899. locality: In clay soil by old boat storage, .2km S of Regneville, Manche County. latitude: 49 deg. 00 min. N. longitude: 1 deg. 33 min. W. elevation: lm. remarks: Plants variable, seed large, population of 22. Twenty one plants sampled. Wild. Seed.
- PI 540646 donor id: WB 900. origin: France. collected: August 27, 1989. collector id: WB 900. locality: Sandy soil in vacant lot above sea wall, Pirou-Plage, 3km S of Lessay, Manche County. latitude: 49 deg. 10 min. N. longitude: 1 deg. 36 min. W. elevation: 2m. remarks: Plants variable, population of 20. Seventeen plants sampled. Wild. Seed.
- PI 540647 donor id: WB 901. origin: France. collected: August 28, 1989. collector id: WB 901. locality: In gravel around boat harbor and oyster bed. 5km W of Portbail, Manche County. latitude: 49 deg. 20 min. N. longitude: 1 deg. 42 min. W. elevation: lm. remarks: Plants variable, population of more than 500, 44 sampled. Wild. Seed.

- PI 540648 donor id: WB 902. origin: France. collected: August 28, 1989. collector id: WB 902. locality: In rocks and cobbles, Port De Dielette, 1 km N of Flamanville, Manche County. latitude: 49 deg. 32 min. N. longitude: 1 deg. 52 min. W. elevation: lm. remarks: Plants variable, large, seed good, population of more than 500. Forty-four plants sampled. Wild. Seed.
- PI 540649 donor id: WB 903. origin: France. collected: August 28, 1989. collector id: WB 903. locality: In gravel on beach, Anse St. Martin, 1.5km E of St.-Germain, Manche County. latitude: 49 deg. 42 min. N. longitude: 1 deg. 53 min. W. elevation: lm. remarks: Plants variable, one mostly monogerm, Population of 500. Fifty plants sampled. Wild. Seed.
- PI 540650 donor id: WB 904. origin: France. collected: August 28, 1989. collector id: WB 904. locality: Sandy soil, Utah beach, Manche County. latitude: 49 deg. 25 min. N. longitude: 1 deg. 15 min. W. elevation: 1m. remarks: Plants variable, large, few seeds, one with monogerm. Population of 15. Eight plants sampled. Wild. Seed.
- PI 540651 donor id: WB 905. origin: France. collected: August 28, 1989. collector id: WB 905. locality: In gravel, .5km S of St. Vaast La-Hougue, Manche County. latitude: 49 deg. 35 min. N. longitude: 1 deg. 16 min. W. elevation: 2m. remarks: Plants variable, large, erect, one with monogerm. Population of more than 500. Twenty-seven plants sampled. Wild. Seed.
- PI 540652 donor id: WB 906. origin: France. collected: August 29, 1989. collector id: WB 906. locality: In gravel, S side anlong canal, 1 km E of Isigny, Calvados County. latitude: 49 deg. 19 min. N. longitude: 1 deg. 06 min. W. elevation: 1m. remarks: Plants variable, mostly green, segregating pigmentation, many with monogerm, seeds few. Population of 100. Nineteen plants sampled. Wild. Seed.
- PI 540653 donor id: WB 907. origin: France. collected: August 29, 1989. collector id: WB 907. locality: In sand and gravel on W end of Omaha Beach, Calvados County. latitude: 49 deg. 22 min. N. longitude: 0 deg. 54 min. W. elevation: lm. remarks: Plants variable, some very large, poor seed set. one with monogerm, population of 100. Twenty-six plants sampled. Wild. Seed.

- PI 540654 donor id: WB 908. origin: France. collected: August 27, 1989. collector id: WB 908. locality: Sandy soil, 1km E of Appromanches, La-Fontaine St. Come, Calvados County. latitude: 49 deg. 19 min. N. longitude: 0 deg. 36 min. W. elevation: 1m. remarks: Plants variable, scattered, some very large, some ms and monogerm, population of 50. Thirty-two plants sampled. Wild. Seed.
- PI 540655 donor id: WB 909. origin: France. collected: August 29, 1989. collector id: WB 909. locality: Clay soil, along W side of Orne River, Pagasus Bridge, 1 km N of Caen, Calvados County. latitude: 49 deg. 15 min. N. longitude: 0 deg. 15 min. W. elevation: 1m. remarks: Plants variable, population of 14. Thirteen plants sampled. Wild. Seed.
- PI 540656 donor id: WB 910. origin: France. collected: August 29, 1989. collector id: WB 910. locality: Clay soil in edge of protected lot, beach, le Home-Varaville, 5km W of Cabourg, Calvados County. latitude: 49 deg. 17 min. N. longitude: 0 deg. 08 min. W. elevation: lm. remarks: Plants variable, large, some monogerm and ms. Population of more than 100. Thirty-two plants sampled. Wild. Seed.
- PI 540657 donor id: WB 911. origin: France. collected: August 29, 1989. collector id: WB 911. locality: Clay soil with gravel, 4km W of Honfleur, Calvados County. latitude: 49 deg. 25 min. N. longitude: 0 deg. 10 min. E. elevation: lm. remarks: Plants variable, large, some seed good, some poor. Population of more than 500. Thirty-two plants sampled. Wild. Seed.
- PI 540658 donor id: WB 912. origin: France. collected: August 30, 1989. collector id: WB 912. locality: In cobbles, only at upper end of harbor, Fecamp, Seine-Maritime County. latitude: 49 deg. 43 min. N. longitude: 0 deg. 14 min. E. elevation: lm. remarks: Plants single type, very large, mostly green, population of 30. Fourteen plants sampled. Wild. Seed.
- PI 540659 donor id: WB 913. origin: France. collected: August 30, 1989. collector id: WB 913. locality: Sandy soil, Estuary of Durdent River, Veulettes, Seine-Maritime County. latitude: 49 deg. 00 min. N. longitude: 0 deg. 25 min. E. elevation: lm. remarks: Plants variable, large, erect, some procumbent, seg. seed size. Population of more than 500. Sixty-five plants sampled. Wild. Seed.

- PI 540660 donor id: WB 914. origin: France. collected: August 30, 1989. collector id: WB 914. locality: In gravel, vacant lot back of sea walls, in small scrappings from treatment plant, St. Marqueritte, 20km W of Dieppe, Seine-Maritime County. latitude: 49 deg. 45 min. N. longitude: 0 deg. 54 min. E. elevation: 2m. remarks: Plants variable, population of more than 100. Forty plants sampled. Wild. Seed.
- PI 540661 donor id: WB 915. origin: France. collected: August 30, 1989. collector id: WB 915. locality: In gravel on Criel Beach, 6km W of LeTreport, Seine-Maritime County. latitude: 50 deg. 01 min. N. longitude: 1 deg. 20 min. E. elevation: 2m. remarks: Plants variable, large, seg erect and procument, seed good. Population of 50. Thirty-one plants sampled. Wild. Seed.
- PI 540662 donor id: WB 916. origin: France. collected: August 30, 1989. collector id: WB 916. locality: Silt soil, S of lighthouse, Le Hourdel, 6km W of St. Valery, Somme County. latitude: 50 deg. 13 min. N. longitude: 1 deg. 34 min. E. elevation: lm. remarks: Plants variable, seg habit, population of 50. Thirty-three plants sampled. Wild. Seed.
- PI 540663 donor id: WB 917. origin: France. collected: September 01, 1989. collector id: WB 917. locality: In gravel, S side of L'AA River, Gravelines, Nord County. latitude: 50 deg. 59 min. N. longitude: 2 deg. 07 min. E. elevation: lm. remarks: Plants variable, large, most plants had been cut. Population of 50. Seven plants sampled. Wild. Seed.
- PI 540664 donor id: WB 918. origin: France. collected: September 01, 1989. collector id: WB 918. locality: Clay soil around oyster beads in sand, Ambleteuse, Pas-De-Calais County. latitude: 50 deg. 47 min. N. longitude: 1 deg. 37 min. E. elevation: 2m. remarks: Plants variable, large, 75% ms. Population of more than 500. Forty-four plants sampled. Wild. Seed.
- PI 540665 donor id: WB 919. origin: France. collected: September 01, 1989. collector id: WB 919. locality: Clay soil on sandy hill and all around homes, N of Wimereux, Pas-De-Calais County. latitude: 50 deg. 46 min. N. longitude: 1 deg. 37 min. E. elevation: 2-15m. remarks: Plants variable, population of more than 500. Forty-three plants sampled. Wild. Seed.

- PI 540666 donor id: WB 920. origin: France. collected: September 01, 1989. collector id: WB 920. locality: Sandy, silt soil along estuary S of tracks, Etaples, Pas-De-Calais County. latitude: 50 deg. 32 min. N. longitude: 1 deg. 37 min. E. elevation: 2m. remarks: Plants variable, population of more than 500. Fifty-one plants sampled. Wild. Seed.
- PI 540667 donor id: WB 921. origin: France. collected: September 01, 1989. collector id: WB 921. locality: Silt soil, few scattered above high tide along dirt dike, in grass, La Madelande l'Authie, 6km E of Bereck, Pas-de-Calais County. latitude: 50 deg. 22 min. N. longitude: l deg. 38 min. E. elevation: 2m. remarks: Plants single type, population of 50. Fifteen plants sampled. Wild. Seed.
- PI 540668 donor id: WB 922. origin: Denmark. collected: September 05, 1989. collector id: WB 922. locality: In rocks and gravel, Point, Sjaellands Odde, Gniben, Sajaelland Island. latitude: 56 deg. 00 min. N. longitude: 11 deg. 18 min. E. elevation: 2m. remarks: Plants variable, mostly procument, some sterile, population of 50. Twenty-three plants sampled. Wild. Seed.
- PI 540669 donor id: WB 923. origin: Denmark. collected: September 05, 1989. collector id: WB 923. locality: Sandy soil, Point, Ordrup Noes, Sjaelland Island. latitude: 55 deg. 50 min. N. longitude: 11 deg. 23 min. E. elevation: lm. remarks: Plants single type, sparsely separated, population of 6. Four plants sampled. Wild. Seed.
- PI 540670 donor id: WB 924. origin: Denmark. collected: September 05, 1989. collector id: WB 924. locality: Sandy soil, 1km S of Sttubberup, Sjaelland Island. latitude: 55 deg. 48 min. N. longitude: 11 deg. 23 min. E. elevation: 1m. remarks: Plants single type, only two plants, one with seed must be self-fertile. One plant sampled. Wild. Seed.
- PI 540671 donor id: WB 925. origin: Denmark. collected: September 05, 1989. collector id: WB 925. locality: In gravel on beach, .5km W of Saltbaek, Sjaelland Island. latitude: 55 deg. 20 min. N. longitude: 11 deg. 08 min. E. elevation: lm. remarks: Plants variable, large, separated beets, segregating pigmentation. Population of more than 100. Twenty-one plants sampled. Wild. Seed.

- PI 540672 donor id: WB 926. origin: Denmark. collected: September 06, 1989. collector id: WB 926. locality: In gravel, near lighthouse, Vesbord, Samso Island. latitude: 55 deg. 46 min. N. longitude: 10 deg. 33 min. E. elevation: lm. remarks: Plants variable, very thick leaves, segregating pigmentation, different from WB 922 925. Population of more than 500. Thirty-two plants sampled. Wild. Seed.
- PI 540673 donor id: WB 927. origin: Denmark. collected: September 06, 1989. collector id: WB 927. locality: In gravel, near lighthouse, Lus Hage Horne, Samso Island. latitude: 55 deg. 46 min. N. longitude: 10 deg. 37 min. E. elevation: lm. remarks: Plants single type, scattered, some seed red, population of 100. Sixteen plants sampled. Wild. Seed.
- PI 540674 donor id: WB 928. origin: Denmark. collected: September 06, 1989. collector id: WB 928. locality: In gravel, in reserve, Besser Rev, Samso Island. latitude: 55 deg. 53 min. N. longitude: 10 deg. 41 min. E. elevation: lm. remarks: Plants variable, very prostrate, seg seed type. Population of more than 500. Twenty-five plants sampled. Wild. Seed.
- PI 540675 donor id: WB 929. origin: Denmark. collected: September 06, 1989. collector id: WB 929. locality: In gravel, Ves Ter L0kker, Samso Island. latitude: 55 deg. 50 min. N. longitude: 10 deg. 32 min. E. elevation: lm. remarks: Plants variable, very prostrate, population of more than 500. Thirty-five plants sampled. Wild. Seed.
- PI 540676 donor id: WB 930. origin: Denmark. collected: September 06, 1989. collector id: WB 930. locality: In gravel, S side of Rodnaes, Sjaelland Island. latitude: 55 deg. 45 min. N. longitude: 10 deg. 50 min. E. elevation: lm. remarks: Plants variable, prostrate, some procument, one has some ms. Population of more than 500. Twenty-six plants sampled. Wild. Seed.
- PI 540677 donor id: WB 931. origin: Denmark. collected: September 06, 1989. collector id: WB 931. locality: In gravel, W of harbor, Reerso, Sjaelland Island. latitude: 55 deg. 32 min. N. longitude: 11 deg. 15 min. E. elevation: 1m. remarks: Plants single type, prostrate, some rosettes look like SB. Population of more than 500. Twenty-four plants sampled. Wild. Seed.

- PI 540678 donor id: WB 932. origin: Denmark. collected: September 07, 1989. collector id: WB 932. locality: In gravel, Mole Strand, Fyn Island. latitude: 55 deg. 30 min. N. longitude: 10 deg. 45 min. E. elevation: lm. remarks: Plants variable, seed green, some appear to be ms and/or monogerm. Population of more than 500. Twenty-four sampled. Wild. Seed.
- PI 540679 donor id: WB 933. origin: Denmark. collected: September 07, 1989. collector id: WB 933. locality: In gravel, Fyns Hoved, Fyn Island. latitude: 55 deg. 37 min. N. longitude: 10 deg. 35 min. E. elevation: lm. remarks: Plants variable, some leaves red, mature and had dropped their seed compared to 932 which were mostly green. Population of more than 500. Fourteen plants sampled. Wild. Seed.
- PI 540680 donor id: WB 934. origin: Denmark. collected: September 08, 1989. collector id: WB 934. locality: In gravel, South tip of Langeland, Downskline, Langeland Island. latitude: 54 deg. 44 min. N. longitude: 10 deg. 40 min. E. elevation: lm. remarks: Plants single type, scattered, must be self-fertile, prostrate, large SB like leaves, one with monogerm. Population of 50. Five plants sampled. Wild. Seed.
- PI 540681 donor id: WB 935. origin: Denmark. collected: September 08, 1989. collector id: WB 935. locality: In gravel, 1km W of Tranekar, Strandby, Langeland Island. latitude: 55 deg. 00 min. N. longitude: 10 deg. 49 min. E. elevation: 1m. remarks: Plants single type, only 5 plants, poor seed. Three plants sampled. Wild. Seed.
- PI 540682 donor id: WB 936. origin: Denmark. collected: September 08, 1989. collector id: WB 936. locality: Clay soil, sand and weeds, Nordstrand, Langeland Island. latitude: 55 deg. 10 min. N. longitude: 10 deg. 59 min. E. elevation: lm. remarks: Plants single type, vigorous, population of more than 100. Sixteen plants sampled. Wild. Seed.
- PI 540683 donor id: WB 937. origin: Denmark. collected: September 08, 1989. collector id: WB 937. locality: In cobbles, Harbor, Onsevig, Lolland Island. latitude: 54 deg. 58 min. N. longitude: 11 deg. 08 min. E. elevation: lm. remarks: Plants single type, single plant not covered by trash from storm two weeks previously. Wild. Seed.

- PI 540684 donor id: WB 938. origin: Denmark. collected: September 09, 1989. collector id: WB 938. locality: In gravel, Vesterhnaes, Lolland Island. latitude: 54 deg. 45 min. N. longitude: 11 deg. 00 min. E. elevation: lm. remarks: Plants variable, many prostrate, some semi monogerm, seed good. Population of more than 500. Twenty-two plants sampled. Wild. Seed.
- PI 540685 donor id: WB 939. origin: Denmark. collected: September 09, 1989. collector id: WB 939. locality: Sandy soil, Klinteby Klint, Sjaelland Island. latitude: 55 deg. ll min. N. longitude: ll deg. 31 min. E. elevation: lm. remarks: Plants single type, mostly green seed, some monogerm. Population of 15. Seven plants sampled. Wild. Seed.
- PI 540686 donor id: WB 940. origin: Denmark. collected: September 09, 1989. collector id: WB 940. locality: In cobbles, Knudshoved Odde, Sjaelland Island. latitude: 55 deg. 04 min. N. longitude: 11 deg. 39 min. E. elevation: lm. remarks: Plants single type, three plants, 1/3km apart, seed very poor, one semi-monogerm. Wild. Seed.
- PI 540687 donor id: WB 940. origin: Belgium. collected: September 19, 1989. collector id: WB 940. locality: Sandy soil and rock wall around harbor and estuary, Nieuwport, Flanders Province. latitude: 51 deg. 11 min. N. longitude: 2 deg. 25 min. E. elevation: lm. remarks: Plants variable, seg. habit and pigmentation. Population of more than 100. Thirty-three plants sampled. Wild. Seed.
- PI 540688 donor id: WB 942. origin: Belgium. collected: September 13, 1989. collector id: WB 942. locality: Clay and sand soil across road from beach, 1km N of Middelkerke Bad, West Flanders Province. latitude: 51 deg. 12 min. N. longitude: 2 deg. 45 min. E. elevation: 5m. remarks: Plants variable, seg. habit, population of 5, all sampled. Wild. Seed.
- PI 540689 donor id: WB 943. origin: Belgium. collected: September 19, 1989. collector id: WB 943. locality: In clay and sand at fence edge across road and by boulders, Oostende, West Flanders Province. latitude: 51 deg. 14 min. N. longitude: 2 deg. 55 min. E. elevation: 5m. remarks: Plants variable, seg. habit, population of 40. Twenty-two. plants sampled. Wild. Seed.

- PI 540690 donor id: WB 944. origin: France. collected: August 10, 1988. collector id: WB 944. locality: In sand and rocks near parking lot, Point de L-Arcouest, Paimpol, Cotes-Du-Nord County. latitude: 48 deg. 83 min. N. longitude: 3 deg. 00 min. W. elevation: .2m. remarks: Forty plants sampled. Wild. Seed.
- PI 540691 donor id: WB 945. origin: France. collected: August 10, 1988. collector id: WB 945. locality: In sand and rocks along beach, Kermagen, Pleabian, Cotes-Du-Nord County. latitude: 48 deg. 85 min. N. longitude: 3 deg. 28 min. W. elevation: .3m. remarks: Thirty-five plants sampled. Wild. Seed.
- PI 540692 donor id: WB 946. origin: France. collected: August 18, 1985. collector id: WB 946. locality: Along border of the beach, Le Pouldu, Santec, Finistere County. latitude: 48 deg. 70 min. N. longitude: 4 deg. 16 min. W. elevation: .3m. remarks: Thirty-five plants sampled. Wild. Seed.
- PI 540693 donor id: WB 947. origin: France. collected: August 18, 1985. collector id: WB 947. locality: Along beach of rocks and sand, Porsemeur, Plouescat, Finistere County. latitude: 48 deg. 67 min. N. longitude: 4 deg. 35 min. W. elevation: .2m. remarks: Eighty plants sampled. Wild. Seed.
- PI 540694 donor id: WB 948. origin: France. collected: August 18, 1985. collector id: WB 948. locality: Estuary of L'Aberwrach near boat dock, Perros, Plougurneau, Finistere County. latitude: 48 deg. 61 min. N. longitude: 4 deg. 69 min. W. elevation: .08m. remarks: Forty plants sampled. Wild. Seed.
- PI 540695 donor id: WB 949. origin: France. collected: August 18, 1985. collector id: WB 949. locality: In sand dunes, Kerdeniel, Portsall, Finistere County. latitude: 48 deg. 56 min. N. longitude: 4 deg. 83 min. W. elevation: .14m. remarks: Plants, widely separated, 20 sampled. Wild. Seed.
- PI 540696 donor id: WB 950. origin: France. collected: August 18, 1985. collector id: WB 950. locality: In cliffs, 1 km N from Point St. Mathieu, Le Conquet, Finistere County. latitude: 48 deg. 34 min. N. longitude: 4 deg. 91 min. W. elevation: .4m. remarks: Plants widely separated, 20 sampled. Wild. Seed.

- PI 540697 donor id: WB 951. origin: France. collected: August 24, 1984. collector id: WB 951. locality: Along W coast in rocks by sand dunes, Kergnoix, St. Pierre Quiberon, Morbihan County. latitude: 48 deg. 51 min. N. longitude: 3 deg. 29 min. W. elevation: .5m. remarks: Twenty plants sampled. Wild. Seed.
- PI 540698 donor id: WB 952. origin: France. collected: August 24, 1984. collector id: WB 952. locality: Along marsh coast, St. Colombier, Saint Armel, Morbihan County. latitude: 47 deg. 54 min. N. longitude: 2 deg. 87 min. W. elevation: .lm. remarks: Fifteen plants sampled. Wild. Seed.
- PI 540699 donor id: WB 953. origin: France. collected: August 24, 1984. collector id: WB 953. locality: In rocks E and W of Point of Penvins, Penvins, Morbihan County. latitude: 47 deg. 49 min. N. longitude: 2 deg. 81 min. W. elevation: .2m. remarks: Fifteen plants sampled. Wild. Seed.
- PI 540700 donor id: WB 954. origin: France. collected: August 24, 1984. collector id: WB 954. locality: At base of sand dunes, Point of Penlan, Billiers, Morbihan County. latitude: 47 deg. 51 min. N. longitude: 2 deg. 63 min. W. elevation: .05m. remarks: Twenty plants sampled. Wild. Seed.
- PI 540701 donor id: WB 955. origin: France. collected: August 14, 1989. collector id: WB 955. locality: In rocky cliffs above sand, Corniche Vendeenne, Vendee County. latitude: 46 deg. 71 min. N. longitude: 2 deg. 12 min. W. elevation: .3m. remarks: Plants small, prostrate, 30 sampled. Wild. Seed.
- PI 540702 donor id: WB 956. origin: France. collected: August 14, 1989. collector id: WB 956. locality: At high tide, Croix de Vie, Croix De Vie, Vendee County. latitude: 46 deg. 69 min. N. longitude: 1 deg. 94 min. W. elevation: .lm. remarks: Plants small and prostrate, sampled 22. Wild. Seed.
- PI 540703. Ipomoea carnea Jacq. CONVOLVULACEAE

Donated by: Jarret, R., Southern Regional PI Station, USDA-ARS, 1109 Experiment St., Griffin, Georgia, United States. Received December 18, 1989.

PI 540703-continued

origin: Colombia. locality: 17km NW of Valle Dupar,
Valle Dupar Province. latitude: 10 deg. 21 min. N.
longitude: 73 deg. 22 min. W. elevation: 160m. Wild.
Seed.

PI 540704 to 540707. Ipomoea nil (L.) Roth CONVOLVULACEAE

Donated by: Jarret, R., Southern Regional PI Station, USDA-ARS, 1109 Experiment St., Griffin, Georgia, United States. Received December 18, 1989.

- PI 540704 origin: Colombia. locality: 2.5km NW Sanjon-Pueblo
 Bello, Valle Dupar Province. latitude: 10 deg. 22 min.
 N. longitude: 73 deg. 24 min. W. elevation: 100m.
 Wild. Seed.
- PI 540705 origin: Colombia. locality: 4km NE Bosconia-Caracoli, Bosconia Province. latitude: 9 deg. 58 min. N. longitude: 73 deg. 55 min. W. elevation: 160m. Wild. Seed.
- PI 540706 origin: Colombia. locality: 5km SW El Dificil-Apure, El Dificil Province. latitude: 9 deg. 50 min. N. longitude: 74 deg. 16 min. W. elevation: 120m. Wild. Seed.
- PI 540707 origin: Colombia. locality: 0.5km E ICA (frente officina), Valle Dupar Province. latitude: 10 deg. 30 min. N. longitude: 73 deg. 12 min. W. elevation: 210m. Wild. Seed.
- PI 540708. Ipomoea squamosa Choisey CONVOLVULACEAE

Donated by: Jarret, R., Southern Regional PI Station, USDA-ARS, 1109 Experiment St., Griffin, Georgia, United States. Received December 18, 1989.

origin: Colombia. locality: 0.1km E Carrera 17, Valle
Dupar Province. latitude: 10 deg. 30 min. N. longitude:
73 deg. 10 min. W. elevation: 190m. Wild. Seed.

PI 540709. Ipomoea sp. CONVOLVULACEAE

Donated by: Jarret, R., Southern Regional PI Station, USDA-ARS, 1109 Experiment St., Griffin, Georgia, United States. Received December 18, 1989.

PI 540709-continued

origin: Colombia. locality: 6.5km NW Sanjon-Pueblo
Bello, Valle Dupar Province. latitude: 10 deg. 36 min.
N. longitude: 73 deg. 28 min. W. elevation: 110m.
Wild. Seed.

PI 540710. Ipomoea cordatotriloba Dennst. CONVOLVULACEAE

Donated by: CIP, P.O. Box 5969, Lima, Peru. Received December 18, 1989.

donor id: CIP 460114. origin: Colombia. collector id:
DLP 3001. locality: 0.1km E Carrera 17, Valle Dupar
Province. latitude: 10 deg. 30 min. N. longitude: 73
deg. 10 min. W. elevation: 190m. Wild. Seed.

PI 540711 to 540714. Ipomoea ramosissima (Poiret) Choisy CONVOLVULACEAE

Donated by: CIP, P.O. Box 5969, Lima, Peru. Received December 18, 1989.

- PI 540711 donor id: CIP 460139. origin: Colombia. collector id: DLP 3008. locality: 1.5km NW Sanjon-Pueblo Bello, Valle Dupar Province. latitude: 10 deg. 22 min. N. longitude: 73 deg. 24 min. W. elevation: 100m. Wild. Seed.
- PI 540712 donor id: CIP 460119. origin: Colombia. collector id: DLP 3010. locality: 6km NW Sanjon-Pueblo Bello, Valle Dupar Province. latitude: 10 deg. 35 min. N. longitude: 73 deg. 26 min. W. elevation: 210m. Wild. Seed.
- PI 540713 donor id: CIP 460140. origin: Colombia. collector id: DLP 3011. locality: 6.5km NW Sanjon-Pueblo Bello, Valle Dupar Province. latitude: 10 deg. 36 min. N. longitude: 73 deg. 28 min. W. elevation: 110m. Wild. Seed.
- PI 540714 donor id: CIP 460141. origin: Colombia. collector id: DLP 3013. locality: 18km SW Maria Angola-Bosconia, Caracoli Province. latitude: 10 deg. 08 min. N. longitude: 73 deg. 38 min. W. elevation: 140m. Wild. Seed.

-1

PI 540715 to 540730. Ipomoea trifida (Kunth) G.Don CONVOLVULACEAE

Donated by: CIP, P.O. Box 5969, Lima, Peru. Received December 18, 1989.

- PI 540715 donor id: CIP 460132. origin: Colombia. collector id: DLP 2988. locality: 6km S Cartegena, Cartagena Province. latitude: 10 deg. 25 min. N. longitude: 75 deg. 30 min. W. elevation: 40m. Wild. Seed.
- PI 540716 donor id: CIP 460133. origin: Colombia. collector id: DLP 2989. locality: 28km E Cartagena-Barrangvilla, Cartagena Province. latitude: 10 deg. 25 min. N. longitude: 75 deg. 20 min. W. elevation: 20m. Wild. Seed.
- PI 540717 donor id: CIP 460134. origin: Colombia. collector id: DLP 2991. locality: 15km NE Clemencia Luruaco, Luruaco Province. latitude: 10 deg. 38 min. N. longitude: 75 deg. 10 min. W. elevation: 20m. Wild. Seed.
- PI 540718 donor id: CIP 460108. origin: Colombia. collector id: DLP 2992. locality: 8km NE Sabana Larga, Sabana Larga Province. latitude: 10 deg. 40 min. N. longitude: 74 deg. 58 min. W. elevation: 120m. Wild. Seed.
- PI 540719 donor id: CIP 460135. origin: Colombia. collector id: DLP 2993. locality: 5km E Barranquilla-Santa Marta, Barranquilla Province. latitude: 10 deg. 58 min. N. longitude: 74 deg. 50 min. W. elevation: 10m. Wild. Seed.
- PI 540720 donor id: CIP 460109. origin: Colombia. collector id: DLP 2994. locality: 20km E Barranquilla, Santa Marta, Cienaga Province. latitude: 10 deg. 56 min. N. longitude: 74 deg. 40 min. W. elevation: 5m. Wild. Seed.
- PI 540721 donor id: CIP 460136. origin: Colombia. collector id: DLP 2995. locality: 13km S Rodadero-Cienaga, Santa Marta Province. latitude: 11 deg. 10 min. N. longitude: 74 deg. 15 min. W. elevation: 20m. Wild. Seed.
- PI 540722 donor id: CIP 460110. origin: Colombia. collector id: DLP 2996. locality: 15km S Rodadero-Cienaga, Santa Marta Province. latitude: 11 deg. 08 min. N. longitude: 74 deg. 15 min. W. elevation: 20m. Wild. Seed.
- PI 540723 donor id: CIP 460111. origin: Colombia. collector id: DLP 2997. locality: 25km S Cienaga-Fundacion, Cienaga Province. latitude: 10 deg. 50 min. N. longitude: 74 deg. 08 min. W. elevation: 20m. Wild. Seed.
- PI 540724 donor id: CIP 460137. origin: Colombia. collector id: DLP 2998. locality: 29km S Fundacion-Copey, Fundacion Province. latitude: 10 deg. 15 min. N. longitude: 74 deg. 05 min. W. elevation: 160m. Wild. Seed.

PI 540715 to 540730-continued

- PI 540725 donor id: CIP 460112. origin: Colombia. collector id: DLP 2999. locality: 9km S Copey-Bosconia, Bosconia Province. latitude: 10 deg. 08 min. N. longitude: 73 deg. 55 min. W. elevation: 140m. Wild. Seed.
- PI 540726 donor id: CIP 460113. origin: Colombia. collector id: DLP 3000. locality: 4km NE Bosconia-Caracoli, Bosconia Province. latitude: 9 deg. 58 min. N. longitude: 73 deg. 55 min. W. elevation: 160m. Wild. Seed.
- PI 540727 donor id: CIP 460120. origin: Colombia. collector id: DLP 3012. locality: 4km S Maria Angola-Bosconia, Caracoli Province. latitude: 10 deg. 10 min. N. longitude: 73 deg. 35 min. W. elevation: 100m. Wild. Seed.
- PI 540728 donor id: CIP 460142. origin: Colombia. collector id: DLP 3014. locality: 3km SW Bosconia-Plato, Bosconia Province. latitude: 9 deg. 55 min. N. longitude: 73 deg. 58 min. W. elevation: 100m. Wild. Seed.
- PI 540729 donor id: CIP 460143. origin: Colombia. collector id: DLP 3015. locality: 5km SW El Dificil-Apure, El Dificil Province. latitude: 9 deg. 50 min. N. longitude: 74 deg. 16 min. W. elevation: 120m. Wild. Seed.
- PI 540730 donor id: CIP 460144. origin: Colombia. collector id: DLP 3016. locality: 5km SW Apure-Plato, Plato Province. latitude: 9 deg. 50 min. N. longitude: 74 deg. 50 min. W. elevation: 140m. Wild. Seed.
- PI 540731. Ipomoea triloba L. CONVOLVULACEAE

Donated by: CIP, P.O. Box 5969, Lima, Peru. Received December 18, 1989.

donor id: CIP 460116. origin: Colombia. collector id:
DLP 3003. locality: .05km E ICA (Frente Oficina), Valle
Dupar Province. latitude: 10 deg. 30 min. N. longitude:
73 deg. 12 min. W. elevation: 210m. Wild. Seed.

PI 540732 to 540735. Ipomoea x leucantha Jacq. CONVOLVULACEAE

Donated by: CIP, P.O. Box 5969, Lima, Peru. Received December 18, 1989.

PI 540732 donor id: CIP 460115. origin: Colombia. collector id: DLP 3002. locality: 0.1km E Diagonal, Valle Dupar Province. latitude: 10 deg. 30 min. N. longitude: 73 deg. 11 min. W. elevation: 210m. Wild. Seed.

PI 540732 to 540735-continued

- PI 540733 donor id: CIP 460117. origin: Colombia. collector id: DLP 3004. locality: .05km E ICA (Calle 20), Valle Dupar Province. latitude: 10 deg. 31 min. N. longitude: 73 deg. 12 min. W. elevation: 210m. Wild. Seed.
- PI 540734 donor id: CIP 460138. origin: Colombia. collector id: DLP 3005. locality: 15km NW Valle Dupar, Valle Dupar Province. latitude: 10 deg. 20 min. N. longitude: 73 deg. 20 min. W. elevation: 140m. Wild. Seed.
- PI 540735 donor id: DLP 3007. origin: Colombia. collector id: DLP 3007. locality: 2.5km NW Sanjon-Pueblo Bello, Valle Dupar Province. latitude: 10 deg. 22 min. N. longitude: 73 deg. 24 min. W. elevation: 100m. Wild. Seed.
- PI 540736. Cucurbita foetidissima H. B. K. CUCURBITACEAE

Donated by: Whitaker, T.W., 2534 Ellentown Rd., P.O. Box 150, La Jolla, California, United States. Received November 1989.

donor id: TWW 63. origin: United States. collected:
October 6, 1988. collector id: TWW 63. locality: Along
Hwy 80, .402km W of Jacumba, San Diego County.
elevation: 853m. remarks: Vine. Leaves coarse sandpaper
like texture with disagreeable odor. Fruits yellow,
round, smooth, 7cm long, 7cm wide. Mature weight 180
grams. Has twice the chromesome no. of all other
cucurbita species. Possesses underground tuber.
Perennial. Wild. Seed.

PI 540737. Cucurbita pedatifolia L. Bailey CUCURBITACEAE

Donated by: Whitaker, T.W., 2534 Ellentown Rd., P.O. Box 150, La Jolla, California, United States. Received November 1989.

donor id: TWW 145. origin: Mexico. collected: August 29, 1988. collector id: TWW 145. locality: 161km SE of San Luis Postosi, San Luis Potosi County. remarks: Vine. Leaves pointed, bluish, Roots tuberous. Stem with tendrils. Fruits dark green, with whitish stripes, round, spherical. Flesh whitish. Weight of 100 seeds 3.3 gr. Odoriferous, similiar to buffalo gourd. Perennial. Wild. Seed.

PI 540738. Solanum sp. SOLANACEAE

Donated by: Jarret, R.L., Southern Regional PI Station, USDA-ARS, 1109 Experiment St., Griffin, Georgia, United States. Received .

PI 540738-continued

origin: Australia. collected: May 1989. locality: Roadside, 10km W of Alice Springs on road to Stanley Chasm, Northern Territory. remarks: Plants thriving under hot, very dry conditions. Fruit dark purple about 2cm in diameter. Wild. Seed.

PI 540739. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Institute of Crop Germplasm Resources, Chinese Academy of Agricultural Sciences, Beijing, China. Received May 8, 1990.

origin: China. cultivar: AN TU BAI CHANG LU DOU.
Cultivar. Seed.

PI 540740. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Konovsky, J.C., Department of Agronomy and Soils, Washington State University, Pullman, Washington, United States. remarks: Originally obtained from the Sakate Seed Company in Japan. Received May 8, 1990.

origin: Japan. cultivar: HATSUTAKA. Cultivar. Seed.

PI 540741 to 540751. Zea mays L. subsp. mays POACEAE Corn

Donated by: Maize Research Program, IITA, P.M.B. 5320, Ibadan, Nigeria. remarks: Received through Pioneer Hi-Bred International. Received May 21, 1990.

- PI 540741 donor id: 1201. origin: Nigeria. cultivar: Tzi 2. pedigree: Across 7622(2)/TZSR. remarks: Plant maturity late. Grain color white. Grain texture dent. Adapted to tropics. Resistant to maize streak virus (MSV). Spring Annual. Breeding Material. Seed.
- PI 540742 donor id: 1394. origin: Nigeria. cultivar: Tzi 5.
 pedigree: Guana Caste 7729/TZSR. remarks: Plant maturity
 late. Grain color white. Grain texture flint. Adapted to
 tropics. Resistant to maize streak virus (MSV). Spring
 Annual. Breeding Material. Seed.
- PI 540743 donor id: 1787. origin: Nigeria. cultivar: Tzi 6.
 pedigree: TZPB Eps (Tuxpeno). remarks: Plant maturity
 medium-late. Grain color white. Grains texture dent.
 Adapted to tropics. Resistant to maize streak virus
 (MSV). Spring Annual. Breeding Material. Seed.

- PI 540744 donor id: 2096. origin: Nigeria. cultivar: Tzi 7.
 pedigree: TZB/TZSR. remarks: Plant maturity late. Grain
 color white. Grain texture flint. Adapted to tropics.
 Resistant to maize streak virus (MSV). Spring Annual.
 Breeding Material. Seed.
- PI 540745 donor id: 9006. origin: Nigeria. cultivar: Tzi 11.
 pedigree: MO17/RppSR(TZ). remarks: Plant maturity
 medium-late. Grain color white. Grain texture dent.
 Adapted to tropics. Resistant to maize streak virus
 (MSV). Spring Annual. Breeding Material. Seed.
- PI 540746 donor id: 9043. origin: Nigeria. cultivar: Tzi 14.

 pedigree: RppTZSR-Y/N28). remarks: Plant maturity
 early-medium. Grain color white. Grain texture
 dent/flint. Adapted to tropics. Resistant to maize streak
 virus (MSV). Spring Annual. Breeding Material. Seed.
- PI 540747 donor id: 9089. origin: Nigeria. cultivar: Tzi 16. pedigree: RppTZSR-Y/N28). remarks: Plant maturity medium-late. Grain color white. Grain texture dent. Adapted to tropics. Resistant to maize streak virus (MSV). Spring Annual. Breeding Material. Seed.
- PI 540748 donor id: 4045. origin: Nigeria. cultivar: Tzi 21.
 pedigree: Poza Rica 7726/TZSR. remarks: Plant maturity
 medium. Grain color yellow. Grain texture dent. Adapted
 to tropics. Resistant to maize streak virus (MSV).
 Spring Annual. Breeding Material. Seed.
- PI 540749 donor id: 7103. origin: Nigeria. cultivar: Tzi 22. pedigree: TZESR-Y. remarks: Grain color yellow. Grain texture dent/flint. Adapted to tropics. Resistant to maize streak virus (MSV). Spring Annual. Breeding Material. Seed.
- PI 540750 donor id: 9236. origin: Nigeria. cultivar: Tzi 23.
 pedigree: Oh43(2)/RppSR. remarks: Plant maturity medium.
 Grain color yellow. Grain texture dent. Adapted to
 tropics. Resistant to maize streak virus (MSV). Spring
 Annual. Breeding Material. Seed.
- PI 540751 donor id: 9479. origin: Nigeria. cultivar: Tzi 26.
 pedigree: F44/RppSR. remarks: Plant maturity medium.
 Grain color yellow. Grain texture dent. Adapted to
 tropics. Resistant to maize streak virus (MSV). Spring
 Annual. Breeding Material. Seed.

- PI 540752 to 540792. Zea mays L. subsp. mays POACEAE Corn
 - Donated by: Getty, R., Coker's Pedigreed Seed Company, Hartsville, South Carolina, United States. remarks: Received through W. Paul Williams, Crop Science Research Laboratory, USDA-ARS, Mississippi State, Mississippi. Received March 9, 1990.
 - PI 540752 origin: United States. cultivar: MERRIT. remarks:
 Plants 270cm tall. Days to mid-silk 78. Ear height 139cm.
 One ear per plant. Grain white. Yield 2959.9kg per
 hectare (Mississippi State, 1989). Spring Annual.
 Primtiv-cv. Seed.
 - PI 540753 origin: United States. cultivar: G.H. MC ELVEEN.
 locality: Kingstree. remarks: Plants 244cm tall. Days to
 mid-silk 77. Ear height 156cm. Number of ears per plant,
 0.9. Grain white. Yield 2727.9kg per hectare (Mississippi
 State 1989). Spring Annual. Primtiv-cv. Seed.
 - PI 540754 origin: United States. cultivar: EARL ROBERTS VARIETY. remarks: Plants 248cm tall. Days to mid-silk 76. Ear height 130cm. One ear per plant. Grain yellow. Yield 2784.3kg per hectare (Mississippi State, 1989). Spring Annual. Primtiv-cv. Seed.
 - PI 540755 origin: United States. cultivar: FIELDS WHITE VARIETY. locality: Lamar. remarks: Plants 238cm tall. Days to mid-silk 76. Ear height 115cm. One ear per plant. Grain white. Yield 2941.lkg per hectare (Mississippi State, 1989). Spring Annual. Primtiv-cv. Seed.
 - PI 540756 origin: United States. cultivar: TEBEAU. remarks:
 Plants 228cm tall. Days to mid-silk 75. Ear height 108cm.
 One ear per plant. Grain white. Yield 3210.8kg per
 hectare (Mississippi State, 1989). Resistant to Southern
 root-knot nematode (Meloidogyne incognita). Spring
 Annual. Primtiv-cv. Seed.
 - PI 540757 origin: United States. cultivar: LECO MILLING CO.
 locality: Kingston. remarks: Plants 262cm tall. Days to
 mid-silk 76. Ear height 142cm. No. or ears per plant,
 l.l. Grain yellow. Yield 3436.5kg per hectare
 (Mississippi State, 1989). Spring Annual. Primtiv-cv.
 Seed.
 - PI 540758 origin: United States. cultivar: OPOSSUM CORN.
 locality: Iron Station. remarks: Plants 227cm tall. Days
 to mid-silk 72. Ear height 102cm. One ear per plant.
 Grain yellow. Yield 2520.9kg per hectare (Mississippi
 State, 1989). Resistant to Southern root-knot nematode
 (Meloidogyne incognita). Spring Annual. Primtiv-cv.
 Seed.

- PI 540759 origin: United States. cultivar: INDIAN FLINT GRAVES. remarks: Plants 262cm tall. Days to mid-silk 84. Ear height 169cm. One ear per plant. Grain yellow. Yield 2063.2kg per hectare. (Mississippi State, 1989). Some resistance to Fall armyworm (Spodoptera frugiperda). Spring Annual. Primtiv-cv. Seed.
- PI 540760 origin: United States. cultivar: WHITE VARIETY BRITTAIN. remarks: Plants 236cm tall. Days to mid-silk 74. Ear height 113cm. One ear per plant. Grain white. Yield 2890.9kg per hectare. (Mississippi State, 1989). Spring Annual. Primtiv-cv. Seed.
- PI 540761 origin: United States. cultivar: SHEPPARD CORN.
 locality: Vidalia. remarks: Plants 249cm tall. Days to
 mid-silk 74. Ear height 124cm. One ear per plant. Grain
 white. Yield 2383kg per kectare (Mississippi State,
 1989). Resistant to Southern root-knot nematode
 (Meloidogyne icognita). Spring Annual. Primtiv-cv.
 Seed.
- PI 540762 origin: United States. cultivar: NESBITT YELLOW.
 remarks: Plants 258cm tall. Days to mid-silk 76. Ear
 height 122cm. One ear per plant. Grain yellow. Yield
 3474.lkg per hectare (Mississippi State, 1989). Spring
 Annual. Primtiv-cv. Seed.
- PI 540763 origin: United States. cultivar: BERRY'S. locality:
 Effingham County. remarks: Plants 254cm tall. Days to
 mid-silk 77. Ear height 138cm. Number of ears per plant,
 0.9. Grain white. Yield 2909.7kg per hectare. Spring
 Annual. Primtiv-cv. Seed.
- PI 540764 origin: United States. cultivar: GEORGIA COW CORN.
 remarks: Plants 247cm tall. Days to mid-silk 74. Ear
 height 146cm. Number of ears per plant, 2.8. Grain white.
 Yield 3279.7kg per hectare. Spring Annual. Primtiv-cv.
 Seed.
- PI 540765 origin: United States. cultivar: WATTS SPECIAL YELLOW.
 locality: Maysville. remarks: Plants 260cm tall. Days to
 mid-silk 77. Ear height 137cm. One ear per plant. Grain
 yellow. Yield 2891kg per hectare. Spring Annual.
 Primtiv-cv. Seed.
- PI 540766 origin: United States. cultivar: ARMSTRONG A. locality:
 Rocky Mountain. remarks: Plants 274cm tall. Days to
 mid-silk 85. Ear height 136cm. Number of ears per plant,
 0.9. Very large ears. Grain yellow. Yield 2903.5kg per
 hectare. Spring Annual. Primtiv-cv. Seed.

PI 540752 to 540792-continued

- PI 540767 origin: United States. cultivar: CHRISTMAS CORN.
 remarks: Plants 268cm tall. Days to mid-silk 78. Ear
 height 141cm. One ear per plant. Grain mixed. Yield
 2903.4kg per hectare. Resistant to Southern root-knot
 nematode (Meloidogyne incognita). Spring Annual.
 Primtiv-cv. Seed.
- PI 540768 origin: United States. cultivar: SMALL COB REX WILSON. remarks: Plants 278cm tall. Days to mid-silk 77. Ear height 154cm. One ear per plant. Grain white (mixed). Yield 3312kg per hectare. Spring Annual. Primtiv-cv. Seed.
- PI 540769 origin: United States. cultivar: J.N. PRICE. remarks:
 Plants 269cm tall. Days to mid-silk 76. Ear height 145cm.
 One ear per plant. Grain yellow. Yield 3091.6kg per
 hectare. Spring Annual. Primtiv-cv. Seed.
- PI 540770 origin: United States. cultivar: TENNESSEE LITTLE COB. locality: Abbeville. remarks: Plants 289cm tall. Days to mid-silk 75. Ear height 130cm. One ear per plant. Grain white. Yield 2847kg per hectare. Spring Annual. Primtiv-cv. Seed.
- PI 540771 origin: United States. cultivar: LEVI MALLARD.
 locality: Pollocksville. remarks: Plants 276cm tall.
 Days to mid-silk 78. Ear height 151cm. One ear per plant.
 Grain mixed. Yield 3223.3kg per hectare. Spring Annual.
 Primtiv-cv. Seed.
- PI 540772 origin: United States. cultivar: LIMBER COB #1.
 locality: Lincolnton. remarks: Plants 239cm tall. Days
 to mid-silk 75. Ear height 123cm. One ear per plant.
 Grain white. Yield 3486.7kg per hectare. Spring Annual.
 Primtiv-cv. Seed.
- PI 540773 origin: United States. cultivar: RUFFIN YELLOW.
 remarks: Plants 233cm tall. Days to mid-silk 76. Ear
 height 106cm. One ear per plant. Grain yellow. Yield
 3787.7kg per hectare. Spring Annual. Primtiv-cv. Seed.
- PI 540774 origin: United States. cultivar: AFRICAN BUSHMAN.
 remarks: Plants 166cm tall. Days to mid-silk 64. Ear
 height 62cm. One ear per plant. Grain white. Yield
 1066.lkg per hectare. Spring Annual. Primtiv-cv. Seed.
- PI 540775 origin: United States. cultivar: ROB STANLEY. locality:
 Milan. remarks: Plants 248cm tall. Days to mid-silk 76.
 Ear height 125cm. One ear per plant. Grain white. Yield
 2571.lkg per hectare. Spring Annual. Primtiv-cv. Seed.

- PI 540776 origin: United States. cultivar: JOHN EDWARDS.
 locality: Greer. remarks: Plants 264cm tall. Days to
 mid-silk 78. Ear height 136cm. Number of ears per plant,
 0.9. Grain white. Yield 2495.9kg per hectare. Spring
 Annual. Primtiv-cv. Seed.
- PI 540777 origin: United States. cultivar: DUTCH AND TALBERTSON. remarks: Plants 241cm tall. Days to mid-silk 74. Ear height 119cm. Number of ears per plant, 0.9. Grain mixed. Yield 2094.5kg per hectare. Spring Annual. Primtiv-cv. Seed.
- PI 540778 origin: United States. cultivar: OLD RACCOON. remarks:
 Plants 233cm tall. Days to mid-silk 75. Ear height 103cm.
 One ear per plant. Grain white. Yield 2564.8kg per
 hectare. Spring Annual. Primtiv-cv. Seed.
- PI 540779 origin: United States. cultivar: FLINT-F.W.BRITTAIN. remarks: Plants 198cm tall. Days to mid-silk 65. Ear height 69cm. One ear per plant. Grain yellow. Yield 1066.1kg per hectare. Spring Annual. Primtiv-cv. Seed.
- PI 540780 origin: United States. cultivar: F.W. BRITTAIN.
 remarks: Plants 238cm tall. Days to mid-silk 74. Ear
 height 112cm. Number of ears per plant, 0.9. Grain white.
 Yield 2765.5kg per hectare. Spring Annual. Primtiv-cv.
 Seed.
- PI 540781 origin: United States. cultivar: DOUTHIT'S PROLIFIC. locality: Pee Dee Station. remarks: Plants 274cm tall. Days to mid-silk 75. Ear height 151cm. Number of ears per plant, 1.3. Grain white. Yield 3599.5kg per hectare. Spring Annual. Primtiv-cv. Seed.
- PI 540782 origin: United States. cultivar: JOHN A. GRIGGS.
 locality: Patrick. remarks: Plants 257cm tall. Days to
 mid-silk 75. Ear height 137cm. Number of ears per plant,
 l.l. Grain mixed. Yield 3066.5kg per hectare. Spring
 Annual. Primtiv-cv. Seed.
- PI 540783 origin: United States. cultivar: JOB BERRY. remarks:
 Plants 277cm tall. Days to mid-silk 82. Ear height 145cm.
 One ear per plant. Grain white. Yield 2909.7kg per
 hectare. Spring Annual. Primtiv-cv. Seed.
- PI 540784 origin: United States. cultivar: HASTINGS YELLOW PROLIFIC. locality: Atlanta. remarks: Plants 263cm tall. Days to mid-silk 78. Ear height 141cm. Number of ears per plant, 1.1. Grain yellow. Yield 2878.4kg per hectare. Spring Annual. Primtiv-cv. Seed.

PI 540752 to 540792-continued

- PI 540785 origin: United States. cultivar: HASTINGS WHITE PROLIFIC. locality: Atlanta. remarks: Plants 291cm tall. Days to mid-silk 83. Ear height 169cm. Number of ears per plant, 1.5. Grain white. Yield 3010.1kg per hectare. Spring Annual. Primtiv-cv. Seed.
- PI 540786 origin: United States. cultivar: HONEY CORN. remarks:
 Plants 247cm tall. Days to mid-silk 75. Ear height 130cm.
 One ear per plant. Grain white. Yield 3392.6kg per
 hectare. Spring Annual. Primtiv-cv. Seed.
- PI 540787 origin: United States. cultivar: LONG EARED WHITE.
 locality: Shelby. remarks: Plants 277cm tall. Days to
 mid-silk 79. Ear height 145cm. One ear per plant. Grain
 white. Yield 2853.3kg per hectare. Spring Annual.
 Primtiv-cv. Seed.
- PI 540788 origin: United States. cultivar: BILL ANSLEY. remarks:
 Plants 269cm tall. Days to mid-silk 80. Ear height 149cm.
 One ear per plant. Grain white. Yield 2991.3kg per
 hectare. Spring Annual. Primtiv-cv. Seed.
- PI 540789 origin: United States. cultivar: BURRIS CORN. locality:
 York. remarks: Plants 253cm tall. Ear height 126cm.
 Number of ears per plant, 1.1. Grain white. Yield
 3499.2kg per hectare. Spring Annual. Primtiv-cv. Seed.
- PI 540790 origin: United States. cultivar: J.M. BRELAND. remarks:
 Plants 252cm tall. Days to mid-silk 75. Ear height 139cm.
 One ear per plant. Grain mixed. Yield 3110.4kg per
 hectare. Spring Annual. Primtiv-cv. Seed.
- PI 540791 origin: United States. cultivar: JOHNNY BEGMAN.
 remarks: Plants 252cm tall. Days to mid-silk 80. Ear
 height 140cm. Number of ears per plant, 0.9. Grain white.
 Yield 2489.6kg per hectare. Spring Annual. Primtiv-cv.
 Seed.
- PI 540792 origin: United States. cultivar: GOLDMAN. pedigree:
 Marlboro/Hastings. remarks: Grain white. Spring Annual.
 Primtiv-cv. Seed.
- PI 540793 to 540802. Sorghum bicolor (L.) Moench POACEAE Grain sorghum

Donated by: Peterson, G.C., Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas, United States. remarks: Tx2859 through Tx2868 Sorghum Germplasm Lines. Received May 22, 1990.

- PI 540793 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2859. pedigree: ((GS110-14*(TAM428*Capbam der))-2-3-1-3)*Tx430). other id: GP-316. group: CSR-SORGHUM. remarks: Resistant to damage caused by biotype E greenbug (Schizaphis graminum). Maturity medium (63 days to 50% anthesis), 104cm in height. Plant color purple, red epicarp color, thin mesocarp, and normal endosperm. Moderately resistant to rust caused by Puccinia purpurea. Resistant to head smut caused by Sphacelotheca reiliana. Spring Annual. Breeding Material. Seed.
- PI 540794 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2860. pedigree: (((GS110-14*(TAM428*Capbam der))-13-1-5-2)*(Tx430*(Tx2746* Tx430))). other id: GP-317. group: CSR-SORGHUM. remarks: Resistant to damage caused by biotype E greenbug (Schizaphis graminum). Maturity medium (65 days to 50% anthesis), 109cm in height. Plant color purple, white epicarp color, thin mesocarp, and normal endosperm. Moderately resistant to rust caused by Puccinia purpurea. Resistant to head smut caused by Sphacelotheca reiliana. Spring Annual. Breeding Material. Seed.
- PI 540795 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2861. pedigree: (Tx2783*((Tx430*((Tx2746*Tx430)-39-1))-13-1)B). other id: GP-318. group: CSR-SORGHUM. remarks: Resistant to damage caused by biotype E greenbug (Schizaphis graminum). Maturity medium-late (75 days to 50% anthesis), 102cm in height. Plant color purple, red epicarp color, thin mesocarp, and normal endosperm. Spring Annual. Breeding Material. Seed.
- PI 540796 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2862. pedigree: (Tx2783*((Tx430*((Tx2746*Tx430)-39-1))-13-1)B). other id: GP-319. group: CSR-SORGHUM. remarks: Resistant to damage caused by biotype E greenbug (Schizaphis graminum). Maturity medium-late (71 days to 50% anthesis), 91cm in height. Plant color purple, red epicarp color, thin mesocarp, and normal endosperm. Spring Annual. Breeding Material. Seed.

- Pf 540797 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2863. pedigree:

 (Tx2783*((Tx430*((Tx2746*Tx430)-39-1))-13-1)B). other
 id: GP-320. group: CSR-SORGHUM. remarks: Resistant to damage caused by biotype E greenbug (Schizaphis graminum). Maturity medium-early (61 days to 50% anthesis), 107cm in height. Plant color purple, red epicarp color, thin mesocarp, and normal endosperm. Spring Annual. Breeding Material. Seed.
- PI 540798 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2864. pedigree: (Tx430*((Tx2783*(Tx430*(Tx2746*Tx430)))-63-1)). other id: GP-321. group: CSR-SORGHUM. remarks: Resistant to damage caused by biotype E greenbug (Schizaphis graminum). Maturity late (76 days to 50% anthesis), 104cm in height. Plant color purple, white epicarp color, thin mesocarp, and yellow endosperm. Moderately resistant to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.
- PI 540799 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2865. pedigree: (Tx430*((Tx2783*(Tx430*(Tx2746*Tx430)))-63-1)). other id: GP-322. group: CSR-SORGHUM. remarks: Resistant to damage caused by biotype E greenbug (Schizaphis graminum). Maturity medium (64 days to 50% anthesis), 104cm in height. Plant color purple, white epicarp color, thin mesocarp, and normal endosperm. Spring Annual. Breeding Material. Seed.
- PI 540800 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2866. pedigree: (Tx430*((Tx2783*(Tx430*(Tx2746*Tx430)))-63-1)). other id: GP-323. group: CSR-SORGHUM. remarks: Resistant to damage caused by biotype E greenbug (Schizaphis graminum). Maturity medium (69 days to 50% anthesis), 102cm in height. Plant color purple, white epicarp color, thin mesocarp, and yellow endosperm. Moderately resistant to rust caused by Puccinia purpurea. Resistant to head smut caused by Sphacelotheca reiliana. Spring Annual. Breeding Material. Seed.

- PI 540801 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2867. pedigree: (Tx430*((Tx2783*(Tx430*(Tx2746*Tx430)))-63-1)). other id: GP-324. group: CSR-SORGHUM. remarks: Resistant to damage caused by biotype E greenbug (Schizaphis graminum). Maturity medium (64 days to 50% anthesis), 109cm in height. Plant color purple, white epicarp color, thin mesocarp, and normal endosperm. Moderately resistant to rust caused by Puccinia purpurea. Resistant to head smut caused by Sphacelotheca reiliana. Spring Annual. Breeding Material. Seed.
- PI 540802 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2868. pedigree: (Tx430*((Tx2783*(Tx430*(Tx2746*Tx430)))-63-1)). other id: GP-325. group: CSR-SORGHUM. remarks: Resistant to damage caused by biotype E greenbug (Schizaphis graminum). Maturity medium (70 days to 50% anthesis), 109cm in height. Plant color purple, white epicarp color, thin mesocarp, and yellow endosperm. Moderately resistant to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.
- PI 540803 to 540824. Sorghum bicolor (L.) Moench POACEAE Grain sorghum

Donated by: Peterson, G.C., Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas, United States. remarks: Tx2869 through Tx2890 Sorghum Germplasm Lines. Received May 22, 1990.

PI 540803 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2869. pedigree: ((TAM2566*(BTx3197*SC170))*Tx2767). other id: GP-326. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity early (53 days to 50% anthesis), 117cm in height. Plant color reddish-purple, red epicarp color, thin mesocarp, and normal endosperm. Moderately resistant to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.

- PI 540804 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757.
 cultivar: Tx2870. pedigree:
 ((TAM2566*(BTx3197*SC170))*Tx2767). other id: GP-327.
 group: CSR-SORGHUM. remarks: Resistant to sorghum midge
 (Contarinia sorghicola). Maturity early (61 days to 50%
 anthesis), 122cm in height. Plant color reddish-purple,
 red epicarp color, thin mesocarp, and normal endosperm.
 Moderately resistant to rust caused by Puccinia purpurea.
 Resistant to head smut caused by Sphacelotheca reiliana.
 Spring Annual. Breeding Material. Seed.
- PI 540805 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2871. pedigree: ((TAM2566*(BTx3197*SC170))*Tx2767). other id: GP-328. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity early (61 days to 50% anthesis), 102cm in height. Plant color reddish-purple, red epicarp color, thin mesocarp, and normal endosperm. Moderately resistant to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.
- PI 540806 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2872. pedigree: ((Tx430*(((RY8*Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-4-4) * Tx2767. other id: GP-329. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity early (54 days to 50% anthesis), l14cm in height. Plant color reddish-purple, white epicarp color, thick mesocarp, and normal endosperm. Excellent resistance to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.
- PI 540807 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2873. pedigree: ((Tx430*(((RY8*Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-4-4) * Tx2767. other id: GP-330. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity early (61 days to 50% anthesis), 124cm in height. Plant color reddish-purple, red epicarp color, thick mesocarp, and normal endosperm. Excellent resistance to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.

- PI 540808 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2874. pedigree: ((Tx430*((RY8*Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-4-4) * Tx2767. other id: GP-331. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity early (62 days to 50% anthesis), 109cm in height. Plant color reddish-purple, white epicarp color, thin mesocarp, and normal endosperm. Excellent resistance to rust caused by Puccinia purpurea. Resistant to head smut caused by Sphacelotheca reiliana. Spring Annual. Breeding Material. Seed.
- PI 540809 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2875. pedigree: ((Tx430*(((RY8*Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-4-4) * Tx2767. other id: GP-332. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity early (57 days to 50% anthesis), ll2cm in height. Plant color reddish-purple, red epicarp color, thick mesocarp, and normal endosperm. Excellent resistance to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.
- PI 540810 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2876. pedigree: ((Tx430*(((RY8*Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-8-24)* Tx2766). other id: GP-333. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity early (57 days to 50% anthesis), 104cm in height. Plant color reddish-purple, red epicarp color, thin mesocarp, and normal endosperm. Resistant to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.
- PI 540811 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2877. pedigree: ((Tx430*(((RY8*Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-8-24)* Tx2766). other id: GP-334. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity early (61 days to 50% anthesis), 102cm in height. Plant color reddish-purple, white epicarp color, thin mesocarp, and normal endosperm. Resistant to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.

- PI 540812 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2878. pedigree: ((Tx430*(((RY8*Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-8-24)* Tx2766). other id: GP-335. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity early (57 days to 50% anthesis), 97cm in height. Plant color reddish-purple, white epicarp color, thin mesocarp, and normal endosperm. Resistant to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.
- PI 540813 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2879. pedigree: ((Tx430*(((RY8*Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-8-24)* Tx2766). other id: GP-336. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity early (61 days to 50% anthesis), 107cm in height. Plant color reddish-purple, white epicarp color, thin mesocarp, and normal endosperm. Resistant to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.
- PI 540814 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2880. pedigree: ((Tx430*(((RY8*Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-8-24)* Tx2766). other id: GP-337. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity early (57 days to 50% anthesis), 109cm in height. Plant color reddish-purple, white epicarp color, thin mesocarp, and normal endosperm. Resistant to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.
- PI 540815 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2881. pedigree: ((Tx430*(((RY8*Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-4-3-3) *Tx2766). other id: GP-338. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity medium-late (68 days to 50% anthesis), 99cm in height. Plant color reddish-purple, white epicarp color, thick mesocarp, and normal endosperm. Resistant to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.

- PI 540816 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2882. pedigree: (Tx430*((SC110-9*(Tx2536*(4dwf Tx7000*SA7536-1)))*SC175-9)). other id: GP-339. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity medium-late (68 days to 50% anthesis), 89cm in height. Plant color reddish-purple, white epicarp color, thin mesocarp, and normal endosperm. Resistant to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.
- PI 540817 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2883. pedigree: ((Tx430*(((RY8Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-5-7-1)* Tx2767). other id: GP-340. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity medium (63 days to 50% anthesis), 109cm in height. Plant color reddish-purple, white epicarp color, thin mesocarp, and normal endosperm. Resistant to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.
- PI 540818 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2884. pedigree: ((Tx430*(((RY8Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-5-7-1)* Tx2767). other id: GP-341. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity medium-late (69 days to 50% anthesis), l19cm in height. Plant color reddish-purple, red epicarp color, thin mesocarp, and normal endosperm. Resistant to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.
- PI 540819 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2885. pedigree: ((Tx430*(((RY8Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-5-7-1)* Tx2767). other id: GP-342. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity early (63 days to 50% anthesis), 119cm in height. Plant color reddish-purple, red epicarp color, thin mesocarp, and normal endosperm. Resistant to rust caused by Puccinia purpurea. Resistant to head smut caused by Sphacelotheca reiliana. Spring Annual. Breeding Material. Seed.

- PI 540820 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2886. pedigree: ((Tx430*(((RY8Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-5-7-1)* Tx2767). other id: GP-343. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity early (63 days to 50% anthesis), 104cm in height. Plant color reddish-purple, white epicarp color, thin mesocarp, and normal endosperm. Resistant to rust caused by Puccinia purpurea. Resistant to head smut caused by Sphacelotheca reiliana. Spring Annual. Breeding Material. Seed.
- PI 540821 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2887. pedigree: (Tx2782*Tx2767). other id: GP-344. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity medium-late (70 days to 50% anthesis), 99cm in height. Plant color reddish-purple, white epicarp color, thick mesocarp, and normal endosperm. Resistant to head smut caused by Sphacelotheca reiliana. Moderate resistance to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.
- PI 540822 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2888. pedigree: ((Tx430*(((RY8*Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-5-5) * ((TAM2566*(BTx3197*SC170))-8-36-2-3-BK-BK-2)). other id: GP-345. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity medium-late (68 days to 50% anthesis), 122cm in height. Plant color reddish-purple, white epicarp color, thin mesocarp, and normal endosperm. Moderate resistance to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.
- PI 540823 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2889. pedigree: ((Tx430*(((RY8*Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-5-5) * Tx2767). other id: GP-346. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity medium (64 days to 50% anthesis), 107cm in height. Plant color reddish-purple, white epicarp color, thin mesocarp, and normal endosperm. Resistant to head smut caused by Sphacelotheca reiliana. Moderate resistance to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.

- PI 540824 origin: United States. origin institute: Texas Agr. Exp. Sta., Route 3, Box 219, Lubbock, Texas 79401-9757. cultivar: Tx2890. pedigree: (Tx2746*SC423). other id: GP-347. group: CSR-SORGHUM. remarks: Resistant to sorghum midge (Contarinia sorghicola). Maturity medium-late (68 days to 50% anthesis), 109cm in height. Plant color tan, white epicarp color, thin mesocarp, and normal endosperm. Resistant to head smut caused by Sphacelotheca reiliana. Excellent resistance to rust caused by Puccinia purpurea. Spring Annual. Breeding Material. Seed.
- PI 540825 to 540836. Arachis hypogaea L. FABACEAE Peanut

- PI 540825 donor id: 715. origin: Bolivia. local name: Mani
 (Spanish). collected: October 1, 1988. collector id:
 715. locality: Dooryard garden, comunidad Totaizal, 50km
 NE of San Borja on road to San Ignacio, S of the
 Biologica Beni, Beni Department, Yacuma Province.
 latitude: 14 deg. 45 min. S. longitude: 66 deg. 40 min.
 W. elevation: 202m. remarks: Plants decumbent without
 flowers on main stem. Leaves dark green. Flowers
 bicolored, orange standard with red striations. Wings
 yellow. Fruits mostly immature. Seeds white. Grown in
 fine, light brown soil. Annual. Cultivated. Seed.
- PI 540826 donor id: 739-1. origin: Bolivia. local name: Mani. collected: October 11, 1988. collector id: 739-1. locality: Rurrenabaque, Beni Department, Ballivian Province. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 268m. remarks: Fruits fairly straight with humps, beaked, little or no constriction containing 4-5 seeds. Seeds tan. Grown locally. Annual. Cultivated. Seed.
- PI 540827 donor id: 739-2. origin: Bolivia. local name: Mani. collected: October 11, 1988. collector id: 739-2. locality: Rurrenabaque, Beni Department, Ballivian Province. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 268m. remarks: Fruits fairly straight with humps, beaked, little or no constriction containing 4-5 seeds. Seeds red. Pods containing red seeds are slightly more slender. Grown locally. Annual. Cultivated. Seed.

- PI 540828 donor id: 742-1. origin: Bolivia. local name: Mani. collected: October 12, 1988. collector id: 742. locality: Rurrenabaque (purchased from a vender, said to have come from La Paz), Beni Department, Ballivian Province. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 268m. remarks: Seeds red, small (overo), shelled. Annual. Cultivated. Seed.
- PI 540829 donor id: 742-2. origin: Bolivia. local name: Mani. collected: October 12, 1988. collector id: 742-2. locality: Rurrenabaque (purchased from a vender, said to have come from La Paz), Beni Department, Ballivian Province. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 268m. remarks: Seeds red and red-white, small (overo), shelled. Annual. Cultivated. Seed.
- PI 540830 donor id: 743-1. origin: Bolivia. local name: Mani overo (Spanish). collected: October 12, 1988. collector id: 743-1. locality: Rurrenabaque, Beni Department, Ballivian Province. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 268m. remarks: Seeds variegated, red and white, shelled. Seed purchased from vendor. received as: Arachis hypogaea subsp hypogaea var. hypogaea. Annual. Cultivated. Seed.
- PI 540831 donor id: 743-1A. origin: Bolivia. local name: Mani overo (Spanish). collected: October 12, 1988. collector id: 743-1A. locality: Rurrenabaque, Beni Department, Ballivian Province. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 268m. remarks: Seeds variegated, red and white, shelled. Seed purchased from vendor. received as: Arachis hypogaea subsp hypogaea var. hypogaea. Annual. Cultivated. Seed.
- PI 540832 donor id: 743-2. origin: Bolivia. local name: Mani overo (Spanish). collected: October 12, 1988. collector id: 743-2. locality: Rurrenabaque, Beni Department, Ballivian Province. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 268m. remarks: Seeds variegated, red and white, shelled. Seed purchased from vendor. received as: Arachis hypogaea subsp hypogaea var. hypogaea. Annual. Cultivated. Seed.

- PI 540833 donor id: 762. origin: Bolivia. local name: Mani Panzo (Spanish) Janide turitchi (Tacana). collected: October 21, 1988. collector id: 762. locality: Rio Enadere and Chacos, Communidad Napashi, Tacana Indian village 7km N of Tumupara, Lowland forest, La Paz Department, Iturralda Province. latitude: 14 deg. 10 min. S. longitude: 67 deg. 55 min. W. elevation: 327m. remarks: Fruits outstanding longiludinal venation, humps, little or no beak, no constriction, containing 3 purple seeds. Cultivated by Tacana Indians on beaches. received as: Arachis hypogaea subsp fastigiata var. Peruviana. Annual. Cultivated. Seed.
- PI 540834 donor id: 824. origin: Bolivia. local name: Mani (Spanish). collected: November 13, 1988. collector id: 824. locality: Cobija market, Pando Department, Nicolas Suarez Province. latitude: 11 deg. 00 min. S. longitude: 68 deg. 45 min. W. elevation: 200m. remarks: Seeds red, small. Grown locally. Annual. Cultivated. Seed.
- PI 540835 donor id: 846. origin: Bolivia. local name: Taba (Yaminahuas). collected: November 16, 1988. collector id: 846. locality: Yaminahuas, Rio Iaco to the N of Brazil, Yaminahua Indian community on the upper Rio Acre, not far from the common point Bolivia, Peru and Brazil, Pando Department, Nicola's Suarez Province. latitude: 11 deg. 00 min. S. longitude: 69 deg. 30 min. W. elevation: 250m. remarks: Fruits 3-5cm long, rought textured with exerted longitudinal veins, fairly straight with humps, beak, little or no constriction, containing 3-4 white seeds. Pegs white. Cultivated by Yaminahua Indians on the beaches of the Upper Rio Acre. received as: Arachis hypogaea subsp fastigiata var. Peruviana. Annual. Cultivated. Seed.
- PI 540836 donor id: 852. origin: Bolivia. local name: Mani blanco. collected: November 19, 1988. collector id: 852. locality: Portachuele Bajo, Esse Ejja Indian village about 50km (air) SSW of Riberalta on Rio Beni, Pando Department, Madre de Dios Province. latitude: ll deg. 19 min. S. longitude: 66 deg. 18 min. W. elevation: 203m. remarks: Plants erect with flowers on the main stem, severely affected by drought, mature in 4 months. Pegs purple, seeds white. Many seeds already germinate in situ. itu. Planted in monoculture in second year of c aco in secondary forest behind the village. Annual. Cultivated. Seed.

PI 540837 to 540857. Arachis hypogaea subsp. fastigiata Waldron FABACEAE Peanut

- PI 540837 donor id: 721-1. origin: Bolivia. local name: Mani blanco (Spanish) Jaibat Yaba (Chimane). collected: October 3, 1988. collector id: 721-1. locality: Cero Ocho, Chimane Indian Village, 17km NNE of the Estacion Biologica Beni, Beni Department, Yacuma Province. latitude: 14 deg. 30 min. S. longitude: 66 deg. 30 min. W. elevation: 218m. remarks: Plants semi-erect. Flowers developed on main stem, bicolored. Orange standard with red striations. Wings yellow. Two to four fruits, seeds tan. Cultivated by Indians on the alluvial yellow sand beaches, land subject to seasonal flooding. Annual. Cultivated. Seed.
- PI 540838 donor id: 721-2. origin: Bolivia. local name: Maniblanco (Spanish) Jaibat Yaba (Chimane). collected:
 October 3, 1988. collector id: 721-2. locality: Cero
 Ocho, Chimane Indian Village, 17km NNE of the Estacion
 Biologica Beni, Beni Department, Yacuma Province.
 latitude: 14 deg. 30 min. S. longitude: 66 deg. 30 min.
 W. elevation: 218m. remarks: Plants semi-erect.
 Flowers developed on main stem, bicolored. Orange
 standard with red striations. Wings yellow. Two to four
 fruits, seeds red. Cultivated by Indians on the alluvial
 yellow sand beaches, land subject to seasonal flooding.
 Annual. Cultivated. Seed.
- PI 540839 donor id: 723. origin: Bolivia. local name: Mani colorado (Spanish) Catiuatke yaba (Chimane). collected: October 3, 1988. collector id: 723. locality: Cero Ocho, Chimane Indian Village on the Rio Curirba, 17km NNe of the Estacion Biologica Beni, Beni Department, Yacuma Province. latitude: 14 deg. 30 min. S. longitude: 66 deg. 30 min. W. elevation: 218m. remarks: Plants semi-erect, purple in color. Flowers produce on main stem, bicolored, orange standard red at base. Wings yellow. Pegs purple. Fruits more with 4 pink seeds. Seeds pink, mature in four months. Many seeds already germinating while still attached to mother plant. Cultivated on sandy beach. Annual. Cultivated. Seed.

- PI 540840 donor id: 738-1. origin: Bolivia. local name: Mani. collected: October 11, 1988. collector id: 738-1. locality: Rurrenabaque, Beni Department, Ballivian Province. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 268m. remarks: Seeds tan. Pods with humps, fairly straight, little or no constriction with 4-5 seeded. Annual. Cultivated. Seed.
- PI 540841 donor id: 738-2. origin: Bolivia. local name: Mani. collected: October 11, 1988. collector id: 738-2. locality: Rurrenabaque, Beni Department, Ballivian Province. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 268m. remarks: Seeds red. Pods with humps, fairly straight, little or no constriction with 4-5 seeded. Annual. Cultivated. Seed.
- PI 540842 donor id: 740-1. origin: Bolivia. local name: Mani. collected: October 12, 1988. collector id: 740-1. locality: Rurrenabaque, Beni Department, Ballivian Province. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 268m. remarks: Seeds tan. Four seeds to a pod. Grown locally. Annual. Cultivated. Seed.
- PI 540843 donor id: 740-2. origin: Bolivia. local name: Mani. collected: October 12, 1988. collector id: 740-2. locality: Rurrenabaque, Beni Department, Ballivian Province. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 268m. remarks: Seeds red. Four seeds to a pod. Grown locally. Annual. Cultivated. Seed.
- PI 540844 donor id: 746-1. origin: Bolivia. local name: Mani rojo (Spanish) Janide derena" (Tacana). collected: October 15, 1988. collector id: 746-1. locality: Rio Beni, Carmen Florida, small village, 5km upstream from Rurrenabaque, on right bank of Rio Beni, Beni Department, Ballivian Province. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 320m. remarks: Seeds tan. Cultivated on sandy beaches by Tacana Indians in Rio Beni. Annual. Cultivated. Seed.

- PI 540845 donor id: 746-2. origin: Bolivia. local name: Mani rojo (Spanish) Janide derena" (Tacana). collected: October 15, 1988. collector id: 746-2. locality: Rio Beni, Carmen Florida, small village, 5km upstream from Rurrenabaque, on right bank of Rio Beni, Beni Department, Ballivian Province. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 320m. remarks: Seeds red. Cultivated on sandy beaches by Tacana Indians in Rio Beni. Annual. Cultivated. Seed.
- PI 540846 donor id: 747. origin: Bolivia. local name: Mani blanco (Spanish) Janide para (Tacana). collected: October 15, 1988. collector id: 747. locality: Carmen Florida, small village about 5km upstream from Rurrenabaque, on right bank of Rio Beni, Beni Department, Ballivian Province. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 320m. remarks: Seeds light pink in color. Cultivated in a chaco by acculturated Tacana Indians. Some shells are attacked by insect. Annual. Cultivated. Seed.
- PI 540847 donor id: 757. origin: Bolivia. local name: Mani colorado. collected: October 19, 1988. collector id: 757. locality: Chacos, Ixiamas. Lapaz Province, Hurralde Province. latitude: 14 deg. 45 min. S. longitude: 68 deg. 10 min. W. elevation: 332m. remarks: Seeds red. Cultivated locally in Chacos. Annual. Cultivated. Seed.
- PI 540848 donor id: 763-1. origin: Bolivia. local name: Mani blanco (Spanish) Janide pashane (Tacana). collected: October 21, 1988. collector id: 763-1. locality: Rio Enadere, Chacos, Comunidad Napashi, Tacona Indian Village, 7km N of Tumupasa, Lowland forest, La Paz Department, Iturralde Province. latitude: 14 deg. 10 min. S. longitude: 67 deg. 55 min. W. elevation: 327m. remarks: Fruits fairly smooth with humps, beaked, little or no constriction, containing 4 tan seeds. Cultivated by Tacana Indians on the beaches of Rio Enadere and in Chacos. Annual. Cultivated. Seed.
- PI 540849 donor id: 763-2. origin: Bolivia. local name: Mani blanco (Spanish) Janide pashane (Tacana). collected: October 21, 1988. collector id: 763-2. locality: Rio Enadere, Chacos, Comunidad Napashi, Tacona Indian Village, 7km N of Tumupasa, Lowland forest, La Paz Department, Iturralde Province. latitude: 14 deg. 10 min. S. longitude: 67 deg. 55 min. W. elevation: 327m. remarks: Fruits fairly smooth with humps, beaked, little or no constriction, containing 4 very light pink seeds. Cultivated by Tacana Indians on the beaches of Rio Enadere and in Chacos. Annual. Cultivated. Seed.

- PI 540850 donor id: 766-1. origin: Bolivia. local name: Mani amarillo (Spanish), Quillu mani (Quechua) Janide tirina (Tacana). collected: October 24, 1988. collector id: 766-1. locality: San Jose de Uchupiamenas, Indian towns, Quechua and Tacana, 35km W of Tumupasa on high bench over the Rio Tuichi. La Paz Department, Iturraldo Province. latitude: 14 deg. 15 min. S. longitude: 68 deg. 10 min. W. elevation: 630m. remarks: Fruits straight, smooth, with humps, beak, no constriction, containing 4-5 small seeds. Seeds ligh yellow, rare. Cultivated on the beaches of the Rio Tuichi. Annual. Cultivated. Seed.
- PI 540851 donor id: 766-2. origin: Bolivia. local name: Mani amarillo (Spanish), Quillu mani (Quechua) Janide tirina (Tacana). collected: October 24, 1988. collector id: 766-2. locality: San Jose de Uchupiamenas, Indian towns, Quechua and Tacana, 35km W of Tumupasa on high bench over the Rio Tuichi. La Paz Department, Iturraldo Province. latitude: 14 deg. 15 min. S. longitude: 68 deg. 10 min. W. elevation: 630m. remarks: Fruits straight, smooth, with humps, beak, no constriction, containing 4-5 small seeds. Seeds red. Cultivated on the beaches of the Rio Tuichi. Annual. Cultivated. Seed.
- PI 540852 donor id: 790-1. origin: Bolivia. local name: Mani blanco (Spanish) Yura mani (Quechua). collected: October 25, 1988. collector id: 790-1. locality: San Jose de Uchupiamonas, Tacana and Quechua Indian town, 35km W of Tumupasa on high bench over the Rio Tuichi, La Paz Department, Iturraldo Province. latitude: 14 deg. 15 min. S. longitude: 68 deg. 10 min. W. elevation: 630m. remarks: Seeds red. Cultivated by Indians on the beaches of the Rio Tuichi and the Rio Pabi. Annual. Cultivated. Seed.
- PI 540853 donor id: 790-2. origin: Bolivia. local name: Maniblanco (Spanish) Yura mani (Quechua). collected: October 25, 1988. collector id: 790-2. locality: San Jose de Uchupiamonas, Tacana and Quechua Indian town, 35km W of Tumupasa on high bench over the Rio Tuichi, La Paz Department, Iturraldo Province. latitude: 14 deg. 15 min. S. longitude: 68 deg. 10 min. W. elevation: 630m. remarks: Seeds red. Cultivated by Indians on the beaches of the Rio Tuichi and the Rio Pabi. Annual. Cultivated. Seed.

- PI 540854 donor id: 795. origin: Bolivia. local name: Mani blanco (Spanish). collected: October 27, 1988. collector id: 795. locality: Chaco, Tumupasa, Tacana Indian town, 50km NW of San Buenaventura on road to Ixiamas. High tropical forest on Andean Piedmont, La Paz Department, Iturralde Province. latitude: 14 deg. 10 min. S. longitude: 67 deg. 55 min. W. elevation: 470m. remarks: Fruits fairly smooth and straight, humps, small beak, containing 4 tan seeds. Cultivated in a chaco in 1987, harvested in 1988. Annual. Cultivated. Seed.
- PI 540855 donor id: 798-1. origin: Bolivia. local name: Mani blanco (Spanish) Janide (Tacana). collected: November 5, 1988. collector id: 798-1. locality: San Marcos, small Tacana Indian Village on right bank of Rio Beni, about 80 air km N of Rurrenabaque, Beni Department, Ballivian Province. latitude: 13 deg. 30 min. S. longitude: 62 deg. 25 min. W. elevation: 220m. remarks: Seeds tan. Three to four seeds to a pod, common. Cultivated by Indians on beaches of the Rio Beni. Annual. Cultivated. Seed.
- PI 540856 donor id: 798-2. origin: Bolivia. local name: Maniblanco (Spanish) Janide (Tacana). collected: November 5, 1988. collector id: 798-2. locality: San Marcos, small Tacana Indian Village on right bank of Rio Beni, about 80 air km N of Rurrenabaque, Beni Department, Ballivian Province. latitude: 13 deg. 30 min. S. longitude: 62 deg. 25 min. W. elevation: 220m. remarks: Seeds red. Three to four seeds to a pod, common. Cultivated by Indians on beaches of the Rio Beni. Annual. Cultivated. Seed.
- PI 540857 donor id: 851. origin: Bolivia. local name: Mani colorado. collected: November 19, 1988. collector id: 851. locality: Portachuele Bajo, Esse Ejja Indian village about 50km (air) SSW of Riberalta on Rio Beni, Pando Department, Madre de Dios Province. latitude: ll deg. 15 min. S. longitude: 66 deg. 18 min. W. elevation: 203m. remarks: Plants erect with flowers on the main stem, severely affected by drought, mature in 4 months under normal condition. Pegs purple, seeds red, germination in situ. Planted in monoculture in a second year. Annual. Cultivated. Seed.

PI 540858 to 540867. Arachis hypogaea L. subsp. hypogaea FABACEAE Peanut

- PI 540858 donor id: 698. origin: Bolivia. local name: Mani pintado. collected: September 22, 1988. collector id: 698. locality: Town plaza, Yotau, 86km N of San Ramon on the road to Ascension de Guarayos, Santa Cruz Department, Nuflo de Chavez Province. latitude: 16 deg. 05 min. S. longitude: 63 deg. 05 min. W. elevation: 325m. remarks: Seeds varigated, red and cream, common. Grown locally. received as: Arachis hypogaea subsp hypogaea var. hypogaea. Annual. Cultivated. Seed.
- PI 540859 donor id: 700-1. origin: Bolivia. local name: Mani guarayo (Spanish) Mandubi (Guarayo). collected: September 23, 1988. collector id: 700-1. locality: Urubicha, Guarayo Indian town, 40km NE of Ascencion de Guarayos, Santa Cruz Department, Nuflo de Chavez Province. latitude: 15 deg. 20 min. S. longitude: 62 deg. 55 min. W. elevation: 270m. remarks: Seeds rounded, varigated, red and cream. Grown locally. received as: Arachis hypogaea subsp hypogaea var. hypogaea. Annual. Cultivated. Seed.
- PI 540860 donor id: 700-2. origin: Bolivia. local name: Mani guarayo (Spanish) Mandubi (Guarayo). collected: September 23, 1988. collector id: 700-2. locality: Urubicha, Guarayo Indian town, 40km NE of Ascencion de Guarayos, Santa Cruz Department, Nuflo de Chavez Province. latitude: 15 deg. 20 min. S. longitude: 62 deg. 55 min. W. elevation: 270m. remarks: Seeds rounded, varigated, red. Grown locally. received as: Arachis hypogaea subsp hypogaea var. hypogaea. Annual. Cultivated. Seed.
- PI 540861 donor id: 700-3. origin: Bolivia. local name: Mani (Spanish) Mandubi (Guarayo). collected: September 23, 1988. collector id: 700-3. locality: Urbicha, Guaraya Indian town, 40km NE of Ascencion de Guarayos, Santa Cruz Department, Nuflo de Chavez Province. latitude: 15 deg. 20 min. S. longitude: 62 deg. 55 min. W. elevation: 270m. remarks: Seeds rounded, varigated, brown. Grown locally. received as: Arachis hypogaea subsp hypogaea var. hypogaea. Annual. Cultivated. Seed.

- PI 540862 donor id: 703. origin: Bolivia. local name: Mani
 (Spanish) Mundubi (Guarayo). collected: September 24,
 1988. collector id: 703. locality: San Pablo, Guarayo
 Indian community, 3km W of Ascencion de Guarayos, Santa
 Cruz Department, Nuflo de Chavez Province. latitude: 15
 deg. 40 min. S. longitude: 63 deg. 15 min. W.
 elevation: 202m. remarks: Seeds rounded, varigated, red
 and cream. Grown locally by the Guarayos Indians.
 received as: Arachis hypogaea subsp hypogaea var.
 hypogaea. Annual. Cultivated. Seed.
- PI 540863 donor id: 710. origin: Bolivia. local name: Mani (Spanish). collected: September 28, 1988. collector id: 710. locality: San Ignacio de Moxos market, Beni Department, Moxos Province. latitude: 14 deg. 50 min. S. longitude: 65 deg. 35 min. W. elevation: 165m. remarks: Seed varigated, red and cream. Grown locally. received as: Arachis hypogaea subsp hypogaea var. hypogaea. Annual. Cultivated. Seed.
- PI 540864 donor id: 737. origin: Bolivia. local name: Mani (Spanish). collected: October 7, 1988. collector id: 737. locality: San Borja market, Beni Department, Ballivian Province. latitude: 14 deg. 50 min. S. longitude: 66 deg. 47 min. W. elevation: 232m. remarks: Seeds mixed, red, pink, and brown. Grown locally. received as: Arachis hypogaea subsp hypogaea var. hypogaea. Annual. Cultivated. Seed.
- PI 540865 donor id: 741. origin: Bolivia. local name: Mani (Spanish). collected: October 12, 1988. collector id: 741. locality: Rurrenabaque, Beni Department, Ballivian Province. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 268m. remarks: Seeds, brown and tan, shelled. Purchased by collector from Vendor, said to have come from Tarija. received as: Arachis hypogaea subsp hypogaea var. hypogaea. Annual. Cultivated. Seed.
- PI 540866 donor id: 825. origin: Bolivia. local name: Mani (Spanish). collected: November 13, 1988. collector id: 825. locality: San Javier del Beni, Cobija Market, Pando Department, Nicolas Suarez. latitude: 11 deg. 00 min. S. longitude: 68 deg. 45 min. W. elevation: 200m. remarks: Seeds brown, large and shelled. Grown locally in Tarija. received as: Arachis hypogaea subsp hypogaea var. hypogaea. Annual. Cultivated. Seed.

PI 540858 to 540867-continued

PI 540867 donor id: 870. origin: Bolivia. local name: Mani (Spanish). collected: November 26, 1988. collector id: 870. locality: Trinidad, Pompeya Market, Beni Department, Cercado Province. latitude: 14 deg. 48 min. S. longitude: 64 deg. 52 min. W. elevation: 155m. remarks: Seeds red and white variegated "overo" seeds. Purchased from the market. received as: Arachis hypogaea subsp hypogaea var. hypogaea. Annual. Cultivated. Seed.

PI 540868 to 540871. Arachis sp. FABACEAE

- PI 540868 donor id: 697. origin: Bolivia. collected: November 22, 1988. collector id: 697. locality: On road to Ascencion de Guarayos, 2km N of Surucusi, before El Puente, Santa Cruz Department, Nuflo de Chavez Province. latitude: 16 deg. 20 min. S. longitude: 62 deg. 55 min. W. elevation: 350m. remarks: Plants prostrate, orange standard. Wings and keel yellow. Growing in disturbed soil along roadside. Soil yellow, extremely hard. Dry deciduous forest in surrounding area. Perennial. Wild. Seed.
- PI 540869 donor id: 699. origin: Bolivia. collected: September 23, 1988. collector id: 699. locality: Ascencion de Guarayas, 2km NE of town on road to Urubicha next to the bridge over the first curiche, Santa Cruz Department, Nuflo de Chavez Province. latitude: 15 deg. 40 min. S. longitude: 63 deg. 05 min. W. elevation: 280m. remarks: Plants prostrate, orange standard. Wings and keel yellow. Somewhat common. Growing along side of road in wet area near swamp. Soil reddish yellow, and sandy. Perennial. Wild. Seed.

PI 540868 to 540871-continued

PI 540870 donor id: 860. origin: Bolivia. collected: November 21, 1988. collector id: 860. locality: Guayaramerim, 50-100m N of air terminal building on the taxiway to the airport, Beni Department, Vaca Diez Province. latitude: 10 deg. 50 min. S. longitude: 65 deg. 25 min. W. elevation: 165m. remarks: Plants procumbent, main stem erect, 10cm high, few large. Flowers small, standard orange with red lines on inside at base, present around the year especially in Nov. 8 - Dec. Wings orange. Pegs short, 4-7cm long. Fruits many, mostly rotten, immature fruits attached to pegs. Growing in dense colonies along edge of taxiway. Soil, red clay mixed with red gravel near taxiway. Annual. Wild. Seed.

PI 540871 donor id: 861. origin: Bolivia. local name: Mani (Spanish). collected: November 21, 1988. collector id: 861. locality: Guayaramerim, Beni Department, Vaca Diez Province. latitude: 10 deg. 50 min. S. longitude: 65 deg. 25 min. W. elevation: 165m. remarks: Plants more or less erect, 40cm tall, emergent, growing in water or saturated soil in drainage ditch. Flowers small, orange standard. Wings yellow. Pegs 10cm long and purple. Fruits many. Some plants also growing among tall sawgrass in same ditch further S of walkway. Soil, reddish-brown clay mud. Annual. Wild. Seed.

PI 540872. Gossypium hirsutum L. MALVACEAE Cotton

Donated by: Southland Seed Company, United States. Received May 15, 1990.

origin: United States. cultivar: SOUTHLAND 400. other id: PVP 9000154. source: Pending. group: PVPO. Cultivar. Seed.

PI 540873. Medicago sativa L. FABACEAE Alfalfa

Donated by: Bouton, J.H., Georgia Agr. Exp. Sta., University of Georgia, Dept. of Agronomy, Athens, Georgia, United States. remarks: Alfagraze Alfalfa. Received May 15, 1990.

PI 540873-continued

origin: United States. origin institute: Georgia Agr. Exp. Station, University of Georgia, Dept. of Agronomy, Athens, Georgia 30602. cultivar: ALFAGRAZE. pedigree: Thirty parental clones derived by recurrent phenotypic selection from the following populations: 22 cultivars (64%), 1070 plant introductions (33%), and Travois (3%). other id: PVP 9000155. source: Pending. group: PVPO. other id: Georgia-GC. other id: GA-GC. remarks: Fall dormancy similar to Vernal. Semi-erect, broad-crowned type. Numberous crown buds in fall. Flower color approx. 100% purple with traces of variegated and cream. Resistance to Fusarium wilt (F. oxysporum). Moderate resistance to anthracnose (Race 1) (Colletotrichum trifolii) and bacterial wilt (Clavibacter michiganese). Low resistance to phytophthora root rot (Phytophthora megasperma) and blue. Perennial. Cultivar. Seed.

PI 540874. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: Pure-Seed Testing, Inc., United States. Received May 15, 1990.

origin: United States. cultivar: PST-DBC. Cultivar.
Seed.

PI 540875. Cichorium intybus L. ASTERACEAE Chicory

Donated by: Grasslands Div., D.S.I.R., United States. Received May 15, 1990.

origin: United States. cultivar: GRASSLANDS PUNA. other
id: PVP 9000157. source: Pending. group: PVPO.
Cultivar. Seed.

PI 540876. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Growmark, Inc., United States. Received May 15, 1990.

origin: United States. cultivar: HS 2533. other id: PVP
9000159. source: Pending. group: PVPO. Cultivar.
Seed.

PI 540877. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: FFR Cooperative, United States. Received May 15, 1990.

PI 540877-continued

origin: United States. cultivar: FFR 464. other id: PVP 9000160. source: Pending. group: PVPO. Cultivar. Seed.

PI 540878 to 540879. Catharanthus roseus (L.) G. Don APOCYNACEAE Vinca

Donated by: University of Connecticut, United States. Received May 15, 1990.

- PI 540878 origin: United States. cultivar: PRETTY IN WHITE. other id: PVP 9000161. source: Pending. group: PVPO. Cultivar. Seed.
- PI 540879 origin: United States. cultivar: PRETTY IN ROSE. other id: PVP 9000162. source: Pending. group: PVPO. Cultivar. Seed.
- PI 540880 to 540884. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Northrup King Company, United States. Received May 15, 1990.

- PI 540880 origin: United States. cultivar: S20-20. other id: PVP 9000163. source: Pending. group: PVPO. Cultivar. Seed.
- PI 540881 origin: United States. cultivar: S25-15. other id: PVP 9000164. source: Pending. group: PVPO. Cultivar. Seed.
- PI 540882 origin: United States. cultivar: S28-18. other id: PVP 9000165. source: Pending. group: PVPO. Cultivar. Seed.
- PI 540883 origin: United States. cultivar: S29-39. other id: PVP 9000166. source: Pending. group: PVPO. Cultivar. Seed.
- PI 540884 origin: United States. cultivar: S43-34. other id: PVP 9000167. source: Pending. group: PVPO. Cultivar. Seed.
- PI 540885. Gossypium hirsutum L. MALVACEAE Cotton

Donated by: California Planting Cotton Seed, United States. Received May 15, 1990.

PI 540885-continued

origin: United States. cultivar: CPCSD ACALA C-4164. other id: PVP 9000168. source: Pending. group: PVPO. Cultivar. Seed.

PI 540886 to 540893. Beta vulgaris L. CHENOPODIACEAE Sugarbeet

Donated by: Hecker, R.J., Agricultural Research Service -- USDA, Crops Research Laboratory, 1701 Center Ave., Fort Collins, Colorado, United States; and Estacion Experimental de Aula Dei. remarks: Eight Sugarbeet Trisomic Genetic Stocks. Received May 24, 1990.

PI 540886 origin: United States. origin institute: Agricultural Research Service -- USDA, Crops Research Laboratory, 1701 Center Ave., Fort Collins, Colorado 80526. cultivar: TRIPLO 1. pedigree: Inbred NB1. Each of eight types of NB1 (2x + 1) was pollinated by NB1(2x). other id: GS-1. source: Crop Sci. 31(1):248 1991. group: CSR-SUGARBEET. remarks: Primary trisomic containing 2x + 1 = 19 chromosomes. Transmission rate of extra chromosome varies from 20 to 2%. Trisomics are expected to exist within this frequency. Use of these trisomics is technically difficult. Trisomics must be identified cytologically among the plants from these seeds. Biennial. Genetic Material. Seed.

PI 540887 origin: United States. origin institute: Agricultural Research Service -- USDA, Crops Research Laboratory, 1701 Center Ave., Fort Collins, Colorado 80526. cultivar: TRIPLO 2. pedigree: Inbred NB1. Each of eight types of NB1 (2x + 1) was pollinated by NB1(2x). other id: GS-2. source: Crop Sci. 31(1):248 1991. group: CSR-SUGARBEET. remarks: Primary trisomic containing 2x + 1 = 19 chromosomes. Transmission rate of extra chromosome varies from 20 to 2%. Trisomics are expected to exist within this frequency. Use of these trisomics is technically difficult. Trisomics must be identified cytologically among the plants from these seeds. Biennial. Genetic Material. Seed.

PI 540886 to 540893-continued

PI 540888 origin: United States. origin institute: Agricultural Research Service -- USDA, Crops Research Laboratory, 1701 Center Ave., Fort Collins, Colorado 80526. cultivar: TRIPLO 3. pedigree: Inbred NB1. Each of eight types of NB1 (2x + 1) was pollinated by NB1(2x). other id: GS-3. source: Crop Sci. 31(1):248 1991. group: CSR-SUGARBEET. remarks: Primary trisomic containing 2x + 1 = 19 chromosomes. Transmission rate of extra chromosome varies from 20 to 2%. Trisomics are expected to exist within this frequency. Use of these trisomics is technically difficult. Trisomics must be identified cytologically among the plants from these seeds. Biennial. Genetic Material. Seed.

PI 540889 origin: United States. origin institute: Agricultural Research Service -- USDA, Crops Research Laboratory, 1701 Center Ave., Fort Collins, Colorado 80526. cultivar: TRIPLO 4. pedigree: Inbred NB1. Each of eight types of NB1 (2x + 1) was pollinated by NB1(2x). other id: GS-4. source: Crop Sci. 31(1):248 1991. group: CSR-SUGARBEET. remarks: Primary trisomic containing 2x + 1 = 19 chromosomes. Transmission rate of extra chromosome varies from 20 to 2%. Trisomics are expected to exist within this frequency. Use of these trisomics is technically difficult. Trisomics must be identified cytologically among the plants from these seeds. Biennial. Genetic Material. Seed.

PI 540890 origin: United States. origin institute: Agricultural Research Service -- USDA, Crops Research Laboratory, 1701 Center Ave., Fort Collins, Colorado 80526. cultivar: TRIPLO 5. pedigree: Inbred NBl. Each of eight types of NBl (2x + 1) was pollinated by NBl(2x). other id: GS-5. source: Crop Sci. 31(1):248 1991. group: CSR-SUGARBEET. remarks: Primary trisomic containing 2x + 1 = 19 chromosomes. Transmission rate of extra chromosome varies from 20 to 2%. Trisomics are expected to exist within this frequency. Use of these trisomics is technically difficult. Trisomics must be identified cytologically among the plants from these seeds. Biennial. Genetic Material. Seed.

- PI 540891 origin: United States. origin institute: Agricultural Research Service -- USDA, Crops Research Laboratory, 1701 Center Ave., Fort Collins, Colorado 80526. cultivar: TRIPLO 7. pedigree: Inbred NBl. Each of eight types of NB1 (2x + 1) was pollinated by NB1(2x). other id: GS-6. **source:** Crop Sci. 31(1):248 1991. group: CSR-SUGARBEET. remarks: Primary trisomic containing 2x + 1 = 19 chromosomes. Transmission rate of extra chromosome varies from 20 to 2%. Trisomics are expected to exist within this frequency. Use of these trisomics is technically difficult. Trisomics must be identified cytologically among the plants from these seeds. Biennial. Genetic Material. Seed.
- PI 540892 origin: United States. origin institute: Agricultural Research Service -- USDA, Crops Research Laboratory, 1701 Center Ave., Fort Collins, Colorado 80526. cultivar: TRIPLO 8. pedigree: Inbred NB1. Each of eight types of NB1 (2x + 1) was pollinated by NB1(2x). other id: GS-7. source: Crop Sci. 31(1):248 1991. group: CSR-SUGARBEET. remarks: Primary trisomic containing 2x + 1 = 19 chromosomes. Transmission rate of extra chromosome varies from 20 to 2%. Trisomics are expected to exist within this frequency. Use of these trisomics is technically difficult. Trisomics must be identified cytologically among the plants from these seeds. Biennial. Genetic Material. Seed.
- PI 540893 origin: United States. origin institute: Agricultural Research Service -- USDA, Crops Research Laboratory, 1701 Center Ave., Fort Collins, Colorado 80526. cultivar: TRIPLO 9. pedigree: Inbred NB1. Each of eight types of NB1 (2x + 1) was pollinated by NB1(2x). other id: GS-8. source: Crop Sci. 31(1):248 1991. group: CSR-SUGARBEET. remarks: Primary trisomic containing 2x + 1 = 19 chromosomes. Transmission rate of extra chromosome varies from 20 to 2%. Trisomics are expected to exist within this frequency. Use of these trisomics is technically difficult. Trisomics must be identified cytologically among the plants from these seeds. Biennial. Genetic Material. Seed.
- PI 540894. Trifolium ambiguum M. Bieb. FABACEAE Kura clover

Donated by: Taylor, N.L., Kentucky Agr. Exp. Sta., University of Kentucky, Lexington, Kentucky, United States. remarks: Ky-l Kura Clover Germplasm. Received May 25, 1990.

PI 540894-continued

origin: United States. origin institute: Kentucky Agr. Exp. Sta., Lexington, Kentucky. cultivar: KY-1.
pedigree: Sixth cycle of phenotypic recurrent selection for first year blooming. Seed harvested from 26 plants that had been pollinated by approx. 322 plants. Base population was PI 325489 Rhizo kura clover. other id: GP-90. source: Crop Sci. 31(1):237 1991. group: CSR-OTHER LEGUMES. remarks: Produced more flower heads in first year than Rhizo (250 vs. 0.0 heads per square meter). Vigor is probably less than Rhizo due to close line breeding during selection. Chromosome number is 6x = 48. Perennial. Breeding Material. Seed.

PI 540895. Cucurbita ecuadorensis Cult. & Whit. CUCURBITACEAE

Donated by: McCreight, J.D., U. S. Agricultural Research Station, 1636 East Alisal Street, Salinas, California, United States. Received May 10, 1990.

donor id: 90. origin: UNKNOWN. remarks: Increased by T.W. Whitaker in 1967, J.D. McCreight, Salinas, California, in 1984, 1985, 1,548 seeds in 13 progenies from controlled pollinations. Cultivated. Seed.

PI 540896 to 540898. Cucurbita lundelliana Bail. CUCURBITACEAE

Donated by: McCreight, J.D., U. S. Agricultural Research Station, 1636 East Alisal Street, Salinas, California, United States. Received May 10, 1990.

- PI 540896 donor id: 93. origin: UNKNOWN. remarks: Increased by T.W. Whitaker at Torrey Pines, California in 1960, J.W. McCreight at Salinas, California in 1984, 1985 and 1986, 7,503 seeds in 32 progenies from controlled pollinations. Cultivated. Seed.
- PI 540897 donor id: 94. origin: UNKNOWN. remarks: Increased by T.W. Whitaker at La Jolla, California in 1967, J.D. McCreight at Salinas and Brawley, California in 1984, 1985 and 1987, 10,813 seeds in 34 progenies from controlled pollinations. Cultivated. Seed.
- PI 540898 donor id: 95. origin: Honduras. remarks: Increased by T.W. Whitaker in 1969. J.D. McCreight at Salinas and Brawley, California in 1984, 1985 and 1987, 11,616 seeds in 25 progenies from controlled pollinations. Cultivated. Seed.

- PI 540899 to 540900. Cucurbita martinezii L. H. Bailey CUCURBITACEAE
 - Donated by: McCreight, J.D., U. S. Agricultural Research Station, 1636 East Alisal Street, Salinas, California, United States. Received May 10, 1990.
 - PI 540899 donor id: 91. origin: UNKNOWN. remarks: Increased by T.W. Whitaker in 1967, J.D. McCreight at Salinas, California in 1985, 3,324 seeds in 24 progenies from controlled pollinations. Cultivated. Seed.
 - PI 540900 donor id: 92. origin: Mexico. locality: Fortin de las flores. remarks: Received by T.W. Whitaker in 1962. Increased by J. D. McCreight at Salinas, California in 1984 and 1985, 3,458 seeds in 21 progenies from controlled pollinations. Cultivated. Seed.
- PI 540901. Cucurbita ficifolia Bouche CUCURBITACEAE

Donated by: McCreight, J.D., U. S. Agricultural Research Station, 1636 East Alisal Street, Salinas, California, United States. Received May 10, 1990.

donor id: 104. origin: UNKNOWN. remarks: Received by T.W. Whitaker in 1970. Quantity of seeds, 15. Cultivated. Seed.

PI 540902 to 540903. Cucurbita foetidissima H. B. K. CUCURBITACEAE Buffalo gourd

Donated by: McCreight, J.D., U. S. Agricultural Research Station, 1636 East Alisal Street, Salinas, California, United States. Received May 10, 1990.

- PI 540902 donor id: 172. origin: United States. collected: August 1966. collector id: 172. locality: Near Brownwood. remarks: Quantity of seeds, 328. Cultivated. Seed.
- PI 540903 donor id: 173. origin: United States. collector id: 173. locality: Open field, near eastbound lanes of Highway 8, 2 miles E of Boulevard-Campo offramp, Boulevard, San Diego County. remarks: Quantity of seeds, 290. Cultivated. Seed.
- PI 540904 to 540906. Cucurbita moschata (Duch.) Duch. ex Poir. CUCURBITACEAE Squash

Donated by: McCreight, J.D., U. S. Agricultural Research Station, 1636 East Alisal Street, Salinas, California, United States. Received May 10, 1990.

- PI 540904 to 540906-continued
 - PI 540904 donor id: 85. origin: UNKNOWN. collector id: 85. locality: India or Sri Lanka. Locality unknown. remarks: Gourd round. Increased by J. D. McCreight at Salinas, California in 1983, 243 seeds in 1 progeny from controlled pollinations. Cultivated. Seed.
 - PI 540905 donor id: 88. origin: UNKNOWN. collector id: 88. locality: India or Sri Lanka. Locality unknown. remarks: Increased by J.D. McCreight at Salinas, California in 1983, 252 seeds in 1 progeny from controlled pollination. Cultivated. Seed.
 - PI 540906 donor id: 89. origin: UNKNOWN. collector id: 89.
 locality: India or Sri Lanka. Locality unknown. remarks:
 Increased by J.D. McCreight at Salinas, California in
 1983, 89 seeds in 1 progeny from controlled populations.
 Long gourd. Cultivated. Seed.
- PI 540907. Cucurbita texana A. Gray CUCURBITACEAE

Donated by: McCreight, J.D., U. S. Agricultural Research Station, 1636 East Alisal Street, Salinas, California, United States. Received May 10, 1990.

donor id: 127. origin: UNKNOWN. remarks: Received from Northrup-King. Quantity of seeds, 327. Cultivated. Seed.

PI 540908 to 540917. Lagenaria siceraria (Mol.) Standl. CUCURBITACEAE Bottle gourd

Donated by: McCreight, J.D., U. S. Agricultural Research Station, 1636 East Alisal Street, Salinas, California, United States. remarks: PI 540912 - 540916 are from same original collection. Received May 10, 1990.

- PI 540908 donor id: 114. origin: UNKNOWN. remarks: Received by T. W. Whitaker. Quantity of seeds, 30. Fruit 30cm x 91cm. Cultivated. Seed.
- PI 540909 donor id: 143. origin: UNKNOWN. collector id: 143.
 locality: India or Sri Lanka. Locality unknown. remarks:
 Increased by J.D. McCreight at Salinas, California in
 1983, 12 seeds in 1 progeny fro controlled pollinations.
 Bottle gourd #1. Cultivated. Seed.

- PI 540910 donor id: 144. origin: UNKNOWN. collector id: 144. locality: India or Sri Lanka. Locality unknown. remarks: Increased by J.D. McCreight at Salinas, California in 1983, 2455 seeds in 2 progenies from controlled pollinations. Bottle gourd #2. Cultivated. Seed.
- PI 540911 donor id: 145. origin: UNKNOWN. collector id: 145. locality: India or Sri Lanka. Locality unknown. remarks: Increased by J.D. McCreight at Salinas, California in 1983, 29 seeds in 1 progeny from controlled pollinations. Smooth gourd. Cultivated. Seed.
- PI 540912 donor id: 146. origin: UNKNOWN. collector id: 146. locality: India or Sri Lanka. Locality unknown. remarks: Increased by J.D. McCreight at Salinas, California in 1983, 341 seeds om 1 progeny from controlled pollinations. Ash gourd. Cultivated. Seed.
- PI 540913 donor id: 147. origin: UNKNOWN. collector id: 147.
 locality: India or Sri Lanka. Locality unknown. remarks:
 Increased by J.D. McCreight at Salinas, California in
 1983, 50 seeds in 1 progeny from controlled pollinations.
 Ash gourd. Cultivated. Seed.
- PI 540914 donor id: 148. origin: UNKNOWN. collector id: 148.
 locality: India or Sri Lanka. Locality unknown. remarks:
 Increased by J.D. McCreight at Salinas, California in
 1983, 101 seeds in 1 progeny from controlled
 pollinations. Ash gourd. Cultivated. Seed.
- PI 540915 donor id: 149. origin: UNKNOWN. collector id: 149. locality: India or Sri Lanka. Locality unknown. remarks: Increased by J.D. McCreight at Salinas, California in 1983, 47 seeds in 1 progeny from controlled pollinations. Ash gourd. Cultivated. Seed.
- PI 540916 donor id: 150. origin: UNKNOWN. collector id: 150. locality: India or Sri Lanka. Locality unknown. remarks: Increased by J.D. McCreight at Salinas, California in 1983, 59 seeds in 1 progeny from controlled pollinations. Ash gourd. Cultivated. Seed.
- PI 540917 donor id: 151. origin: UNKNOWN. collector id: 151.
 locality: India or Sri Lanka. Locality unknown. remarks:
 Increased by J.D. McCreight at Salinas, California in
 1983, 229 seeds in 1 progeny from controlled
 pollinations. Smooth gourd. Cultivated. Seed.

PI 540918 to 540919. Luffa acutangula (L.) Roxb. CUCURBITACEAE Singkwa towelgourd

Donated by: McCreight, J.D., U. S. Agricultural Research Station, 1636 East Alisal Street, Salinas, California, United States. Received May 10, 1990.

- PI 540918 donor id: 141. origin: UNKNOWN. collector id: 141.
 locality: India or Sri Lanka. Locality unknown. remarks:
 Increased by J.D. McCreight at Salinas, California in
 1983, 157 seeds in 1 progeny from controlled
 pollinations. Cultivated. Seed.
- PI 540919 donor id: 142. origin: UNKNOWN. collector id: 142.
 locality: India or Sri Lanka. Locality unknown. remarks:
 Increased by J.D. McCreight at Salinas, California in
 1983, 35 seeds in 1 progeny from controlled pollinations.
 Cultivated. Seed.
- PI 540920. Luffa aegyptiaca Miller CUCURBITACEAE Vegetable sponge

Donated by: McCreight, J.D., U. S. Agricultural Research Station, 1636 East Alisal Street, Salinas, California, United States. Received May 10, 1990.

donor id: 1416. origin: UNKNOWN. collector id: 1416. locality: India or Sri Lanka. Locality unknown. remarks: Increased by J.D. McCreight at Salinas, California in 1983, 35 seeds in 1 progeny from controlled pollinations. Cultivated. Seed.

PI 540921. Luffa graveolens Roxb. CUCURBITACEAE

Donated by: McCreight, J.D., U. S. Agricultural Research Station, 1636 East Alisal Street, Salinas, California, United States. Received May 10, 1990.

donor id: 105. origin: UNKNOWN. locality: India or Sri Lanka. Locality unknown. remarks: Received by T.W. Whitaker, increased by J.D. McCreight at Brawley, California in 1984, approximately 5,500 seeds in 1 bulked progeny from open pollinations in field with L. acutangula and L. cylindrica, but not with other collections of L. graveolens. Cultivated. Seed.

PI 540922 to 540923. Pyrus amyqdaliformis Villars ROSACEAE

Donated by: Lombard, Dr. Porter, Oregon State University, Department of Horticulture, Cordley Hall 2042, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received February 21, 1981.

PI 540922 to 540923-continued

- PI 540922 origin: Greece. developer country: United States.
 origin institute: Oregon State University, Experiment
 Station, Medford, Oregon. pedigree: Seedling selection
 from seed collected in Greece. Perennial. Breeding
 Material. Plant.
- PI 540923 origin: Greece. developer country: United States.
 origin institute: Oregon State University, Experiment
 Station, Medford, Oregon. pedigree: Seedling selection
 from seed collected in Greece. Perennial. Breeding
 Material. Plant.
- PI 540924. Pyrus amygdaliformis Villars ROSACEAE

Donated by: Fridlund, Dr. Paul, Washington State University, Irrigated Agriculture and Extension, Center, Prosser, Washington, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 31, 1981.

origin: Turkey. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection from seedlot collected in Turkey. Perennial. Breeding Material. Plant.

PI 540925. Pyrus amygdaliformis Villars ROSACEAE

Donated by: Anderson, Dr. Peter, Missouri State University, State Fruit Experiment Station, Mountain Grove, Missouri, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received May 01, 1982.

origin: United States. origin institute: Oregon State University, Department of Horticulture, Corvallis, Oregon. Perennial. Breeding Material. Plant.

PI 540926 to 540933. Pyrus amyqdaliformis Villars ROSACEAE

Donated by: Westwood, Dr. M.N., Oregon State University, NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

- PI 540926 origin: United States. pedigree: Collected from the wild. collected: October 03, 1966. Perennial. Wild. Seed.
- PI 540927 origin: UNCERTAIN. pedigree: Collected from the wild. collected: October 03, 1966. Perennial. Wild. Seed.

PI 540926 to 540933-continued

- PI 540928 origin: Europe. pedigree: Collected from the wild in Europe. Perennial. Wild. Seed.
- PI 540929 origin: Turkey. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling selection from seedlot collected wild in Turkey.
 Perennial. Breeding Material. Plant.
- PI 540930 origin: Turkey. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling selection from seedlot collected wild in Turkey.
 Perennial. Breeding Material. Plant.
- PI 540931 origin: Yugoslavia. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling
 selection from seed collected in Yugoslavia. locality:
 Macedonia. Perennial. Breeding Material. Plant.
- PI 540932 origin: Italy. pedigree: Collected from the wild in Italy. locality: Sardinia. latitude: 39 deg. 57 min. N. longitude: 09 deg. E. Perennial. Wild. Seed.
- PI 540933 origin: Yugoslavia. pedigree: Collected from the wild in Yugoslavia. locality: Germiaan Village, Techam. Perennial. Wild. Seed.

PI 540934 to 540941. Pyrus amygdaliformis Villars ROSACEAE

Donated by: Westwood, Dr. M.N., Oregon State University, NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received January 22, 1986.

- PI 540934 origin: Italy. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection A from seedlot collected in Sardinia. Perennial. Breeding Material. Cutting.
- PI 540935 origin: Italy. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection B from seedlot collected in Sardinia. Perennial. Breeding Material. Cutting.

PI 540934 to 540941-continued

- PI 540936 origin: Italy. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection C from seedlot from Sardinia. Perennial. Breeding Material. Cutting.
- PI 540937 origin: Greece. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling
 selection from seedlot collected in Greece. Perennial.
 Breeding Material. Cutting.
- PI 540938 origin: Turkey. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling selection from seedlot WB-11 collected in Turkey.
 Perennial. Breeding Material. Cutting.
- PI 540939 origin: Turkey. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling
 selection from seedlot WB-9 collected in Turkey.
 Perennial. Breeding Material. Cutting.
- PI 540940 origin: Turkey. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling selection from seedlot WB-8 collected in Turkey.
 Perennial. Breeding Material. Cutting.
- PI 540941 origin: Turkey. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling selection from seedlot WB-7 collected in Turkey.
 Perennial. Breeding Material. Cutting.

PI 540942 to 540946. Pyrus betulifolia Bunge ROSACEAE

Donated by: Lombard, Dr. Porter, Oregon State University, Department of Horticulture, Cordley Hall 2042, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received February 21, 1981.

PI 540942 origin: China. developer country: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. pedigree: Probably a seedling selection from Chinese seedlot. Perennial. Breeding Material. Plant.

PI 540942 to 540946-continued

- PI 540943 origin: China. developer country: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OPR 110. pedigree: Seedling selection from seed collected in China by Reimer. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 540944 origin: China. developer country: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OPR 111. pedigree: Seedling selection from seed collected in China by Reimer. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 540945 origin: China. developer country: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OPR 113. pedigree: Seedling selection from seed collected in China by Reimer. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 540946 origin: China. developer country: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OPR 114. pedigree: Seedling selection from seed collected in China by Reimer. local name: Rootstock Pear. Perennial. Breeding Material. Plant.

PI 540947. Pyrus betulifolia Bunge ROSACEAE

Donated by: Waterworth, Dr. Howard, USDA-ARS, National Program Staff, Room 228 Bldg 005, BARC-West, Beltsville, Maryland, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 24, 1981.

origin: China. pedigree: Collected from the wild in China. Perennial. Wild. Plant.

PI 540948. Pyrus betulifolia Bunge ROSACEAE

Donated by: Fridlund, Dr. Paul, Washington State University, Irrigated Agriculture and Extension, Center, Prosser, Washington, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 31, 1981.

origin: Japan. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection from seed collected in Japan. Perennial. Breeding Material. Plant.

PI 540949. Pyrus betulifolia Bunge ROSACEAE

Donated by: Callan, Dr. Nancy, Western Agricultural Research Center, 531 NE Quast Lane, Corvallis, Montana, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 24, 1982.

origin: China. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection from seedlot collected wild in China. Perennial. Breeding Material. Plant.

PI 540950 to 540954. Pyrus betulifolia Bunge ROSACEAE

Donated by: Anderson, Dr. Peter, Missouri State University, State Fruit Experiment Station, Mountain Grove, Missouri, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received May 01, 1982.

- PI 540950 origin: United States. origin institute: Oregon State University, Department of Horticulture, Corvallis, Oregon. Perennial. Breeding Material. Plant.
- PI 540951 origin: United States. origin institute: Oregon State University, Department of Horticulture, Corvallis, Oregon. Perennial. Breeding Material. Plant.
- PI 540952 origin: United States. origin institute: Oregon State University, Department of Horticulture, Corvallis, Oregon. Perennial. Breeding Material. Plant.
- PI 540953 origin: United States. origin institute: Oregon State University, Department of Horticulture, Corvallis, Oregon. Perennial. Breeding Material. Plant.
- PI 540954 origin: United States. origin institute: Oregon State University, Department of Horticulture, Corvallis, Oregon. Perennial. Breeding Material. Plant.

PI 540955. Pyrus betulifolia Bunge ROSACEAE

Donated by: Arnold Arboretum, The Arborway, Jamaica Plain, Massachusetts, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

origin: United States. pedigree: Open-pollinated from botanical collection. Perennial. Cultivated. Seed.

PI 540956 to 540994. Pyrus betulifolia Bunge ROSACEAE

Donated by: Westwood, Dr. M.N., Oregon State University, NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

- PI 540956 origin: China. pedigree: Collected from the wild in China. local name: Du Li. collected: October 09, 1964. Perennial. Wild. Seed.
- PI 540957 origin: UNCERTAIN. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: OP P. betulifolia seedling selection. Perennial. Breeding Material. Cutting.
- PI 540958 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: OP seed from seedling selection from Asian seedlot. Perennial. Breeding Material. Seed.
- PI 540959 origin: UNCERTAIN. pedigree: Collected from the wild. Perennial. Wild. Seed.
- PI 540960 origin: China. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: OP seed from seedling selection from a Chinese seedlot. Perennial. Breeding Material. Seed.
- PI 540961 origin: China. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: OP seed from seedling selection from Chinese seedlot. Perennial. Breeding Material. Seed.
- PI 540962 origin: Italy. pedigree: Collected from the wild in Italy. latitude: 42 deg. N. longitude: 13 deg. E. Perennial. Wild. Seed.
- PI 540963 origin: China. pedigree: Collected from the wild in China. Perennial. Wild. Seed.
- PI 540964 origin: China. pedigree: Collected from the wild in China. Perennial. Wild. Seed.
- PI 540965 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection from P. betulifolia-3. Perennial. Breeding Material. Plant.

- PI 540966 origin: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. pedigree: Seedling selection A of P. betulifolia OSU-1. Perennial. Breeding Material. Plant.
- PI 540967 origin: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. pedigree: Seedling selection from P. betulifolia OSU-1. Perennial. Breeding Material. Plant.
- PI 540968 origin: China. developer country: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. pedigree: Seedling selection A from P. betulifolia OSU-3. Perennial. Breeding Material. Plant.
- PI 540969 origin: China. developer country: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OSU-3. pedigree: Seedling selection from seed collected in China. Perennial. Breeding Material. Plant.
- PI 540970 origin: China. developer country: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OSU-3. pedigree: Seedling selection from seed collected in China. Perennial. Breeding Material. Cutting.
- PI 540971 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection from Asian seedlot. Perennial. Breeding Material. Plant.
- PI 540972 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection from Asian seedlot. Perennial. Breeding Material. Plant.
- PI 540973 origin: China. developer country: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. pedigree: Seedling selection from seed collected in China. Perennial. Breeding Material. Plant.
- PI 540974 origin: China. developer country: United States. origin institute: Culbertson's Orchard, Medford, Oregon. pedigree: Seedling selection from seed collected from North China. Perennial. Breeding Material. Plant.

- PI 540975 origin: China. developer country: United States. origin institute: Culbertson's Orchard, Medford, Oregon. pedigree: Seedling selection from seed collected from North China. Perennial. Breeding Material. Plant.
- PI 540976 origin: China. developer country: United States. origin institute: Culbertson's Orchard, Medford, Oregon. pedigree: Seedling selection from seed collected from North China. Perennial. Breeding Material. Plant.
- PI 540977 origin: China. developer country: United States. origin institute: Culbertson's Orchard, Medford, Oregon. pedigree: Seedling selection from seed collected from North China. Perennial. Breeding Material. Plant.
- PI 540978 origin: China. developer country: United States. origin institute: Culbertson's Orchard, Medford, Oregon. pedigree: Seedling selection from seed collected from North China. Perennial. Breeding Material. Plant.
- PI 540979 origin: China. developer country: United States. origin institute: Culbertson's Orchard, Medford, Oregon. pedigree: Seedling selection from seed collected from North China. Perennial. Breeding Material. Plant.
- PI 540980 origin: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: P. betulifolia-2 x P. betulifolia-1 seedling selection A. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 540981 origin: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OPR 259. pedigree: P. betulifolia No. 3 seedling selection. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 540982 origin: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OPR 260. pedigree: P. betulifolia No. 3 seedling selection. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 540983 origin: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OPR 261. pedigree: P. betulifolia No. 3 seedling selection. local name: Rootstock Pear. Perennial. Breeding Material. Plant.

- PI 540984 origin: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OPR 262. pedigree: P. betulifolia No. 3 seedling selection. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 540985 origin: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OPR 263. pedigree: P. betulifolia No. 3 seedling selection. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 540986 origin: Asia. developer country: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OPR 264. pedigree: P. betulifolia No. 3 seedling selection from Asian seedlot. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 540987 origin: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OPR 265. pedigree: P. betulifolia No. 3 seedling selection. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 540988 origin: United States. origin institute: Oregon State
 Univ, Experiment Station, Talent, Oregon. cultivar: OPR
 266. pedigree: P. betulifolia No. 3 seedling selection.
 local name: Rootstock Pear. Perennial. Breeding
 Material. Plant.
- PI 540989 origin: Asia. developer country: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. pedigree: Seedling selection B of P. betulifolia-3 from Asian seedlot. Perennial. Breeding Material. Plant.
- PI 540990 origin: Asia. developer country: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. pedigree: Seedling selection C of P. betulifolia-3 from Asian seedlot. Perennial. Breeding Material. Plant.
- PI 540991 origin: Asia. developer country: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. pedigree: Seedling selection of P. betulifolia-3 from Asian seedlot. Perennial. Breeding Material. Plant.

- PI 540992 origin: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OSU-1. pedigree: Seedling selection B of P. betulifolia OSU-1. Perennial. Breeding Material. Plant.
- PI 540993 origin: China. developer country: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OSU-3. pedigree: Seedling selection B of P. betulifolia OSU-3. Perennial. Breeding Material. Plant.
- PI 540994 origin: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: P. betulifolia-2 x P. betulifolia-1 seedling selection B. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 540995. Pyrus betulifolia Bunge ROSACEAE

Donated by: Ansaloni, Paciotti, Soc Florislva Ansaloni, Box 2100 & 0100, Bologna, Italy. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 18, 1987.

origin: Italy. developer country: China. Perennial.
Uncertain. Seed.

PI 540996. Pyrus betulifolia Bunge ROSACEAE

Donated by: Ansaloni, Paciotti, Soc Florislva Ansaloni, Box 2100 & 0100, Bologna, Italy. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 31, 1987.

origin: Italy. developer country: China. Perennial.
Uncertain. Seed.

PI 540997. Pyrus betulifolia Bunge ROSACEAE

Donated by: Westwood, Dr. M.N., Oregon State University, NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received February 18, 1988.

origin: China. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: OP seed from seedling selections from seedlot from China. Perennial. Breeding Material. Seed.

PI 540998 to 541001. Pyrus betulifolia Bunge ROSACEAE

Donated by: Westwood, Dr. M.N., Oregon State University, NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received February 19, 1988.

- PI 540998 origin: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. pedigree: Probably a seedling selection. Perennial. Breeding Material. Cutting.
- PI 540999 origin: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. pedigree: Probably a seedling selection. Perennial. Breeding Material. Cutting.
- PI 541000 origin: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. pedigree: Probably a seedling selection. Perennial. Breeding Material. Cutting.
- PI 541001 origin: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. pedigree: Probably a seedling selection. Perennial. Breeding Material. Cutting.

PI 541002 to 541006. Pyrus betulifolia Bunge ROSACEAE

Donated by: Sugar, Dr. David, Oregon State University, Southern Oregon Experiment Station, 569 Hanley Road, Medford, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received February 24, 1988.

- PI 541002 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. pedigree: Seedling selection #1 from P. betulifolia-3 from China. Perennial. Breeding Material. Cutting.
- PI 541003 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. pedigree: Seedling selection #2 from P. betulifolia-3 from China. Perennial. Breeding Material. Cutting.
- PI 541004 origin: United States. origin institute: Oregon State University, Exp. Station, Medford, Oregon. pedigree: Seedling selection #4 from P. betulifolia-3 from China. Perennial. Breeding Material. Cutting.
- PI 541005 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. pedigree: Seedling selection #6 from P. betulifolia-3 from China. Perennial. Breeding Material. Cutting.

- PI 541002 to 541006-continued
 - PI 541006 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. pedigree: Seedling selection #7 from P. betulifolia-3 from China. Perennial. Breeding Material. Cutting.
- PI 541007. Pyrus betulifolia Bunge ROSACEAE

Donated by: Shulleta, Maria, Phillip Morris Research Center, 4201 Commerce Road, Richmond, Virginia, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 29, 1989.

origin: China. pedigree: Collected from the wild in China. local name: Du Li. locality: Shanxi Province. latitude: 38 deg. N. longitude: 106 deg. E. elevation: 2000m. Perennial. Wild. Seed.

PI 541008. Pyrus boissieriana Buhse ROSACEAE

Donated by: Westwood, Dr. M.N., Oregon State University, NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

origin: Europe. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Probably a selection from OP seed from botanical collection. Perennial. Breeding Material. Plant.

PI 541009 to 541012. Pyrus calleryana Decne. ROSACEAE Callery pear

Donated by: Lombard, Dr. Porter, Oregon State University, Department of Horticulture, Cordley Hall 2042, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received February 21, 1981.

- PI 541009 origin: Asia. developer country: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. pedigree: Probably a seedling selection from an Asian seedlot. Perennial. Breeding Material. Plant.
- PI 541010 origin: United States. origin institute: Howell County Nursery, Missouri. Perennial. Breeding Material. Plant.

- PI 541009 to 541012-continued
 - PI 541011 origin: Asia. developer country: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. pedigree: Probably a seedling selection from an Asian seedlot. Perennial. Breeding Material. Plant.
 - PI 541012 origin: United States. origin institute: Oregon State
 University, Experiment Station, Crown Point Orchard,
 Medford, Oregon. cultivar: OPR 157. pedigree: Unknown.
 local name: Rootstock Pear. Perennial. Breeding
 Material. Plant.
- PI 541013 to 541014. Pyrus calleryana Decne. ROSACEAE Callery Pear

Donated by: Waterworth, Dr. Howard, USDA-ARS, National Program Staff, Room 228 Bldg 005, BARC-West, Beltsville, Maryland, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 24, 1981.

- PI 541013 origin: United States. developer country: United States. cultivar: Capitol. pedigree: Seedling selection. local name: Ornamental Pear. Perennial. Cultivar. Plant.
- PI 541014 origin: Europe. developer country: United States. origin institute: USDA/ARS, Glenn Dale, Maryland. pedigree: P. calleryana D-6 (PI 233634) x Bradford Dwarf. Perennial. Breeding Material. Seed.
- PI 541015. Pyrus calleryana Decne. ROSACEAE Callery Pear

Donated by: Pacific Coast Nursery, 18616 NW Reeder Road, Portland, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 31, 1981.

origin: Asia. pedigree: Collected from the wild in Asia. Perennial. Wild. Seed.

PI 541016. Pyrus calleryana Decne. ROSACEAE Callery Pear

Donated by: Stark III, Paul, Stark Bros. Nurseries, Orchard Co., Louisiana, Missouri, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 31, 1981.

origin: United States. origin institute: Southern
Nursery, Tennessee. pedigree: Open pollinated.
Perennial. Breeding Material. Seed.

PI 541017 to 541019. Pyrus calleryana Decne. ROSACEAE Callery Pear

Donated by: Fridlund, Dr. Paul, Washington State University, Irrigated Agriculture and Extension, Center, Prosser, Washington, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 31, 1981.

- PI 541017 origin: United States. developer country: United States. origin institute: Oregon State University, Dept. of Horticulture, Corvallis, Oregon. pedigree: Seedling selection from seed rec'd from Southern Nursery. Perennial. Breeding Material. Plant.
- PI 541018 origin: United States. developer country: Asia. pedigree: Uncertain. Perennial. Uncertain. Plant.
- PI 541019 origin: United States. developer country: Asia. pedigree: Uncertain. Perennial. Uncertain. Plant.
- PI 541020. Pyrus calleryana Decne. ROSACEAE Callery Pear

Donated by: Anderson, Dr. Peter, Missouri State University, State Fruit Experiment Station, Mountain Grove, Missouri, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received May 01, 1982.

origin: United States. origin institute: Oregon State
University, Department of Horticulture, Corvallis,
Oregon. Perennial. Breeding Material. Plant.

PI 541021. Pyrus calleryana Decne. ROSACEAE Callery Pear

Donated by: Lombard, Dr. Porter, Oregon State University, Department of Horticulture, Cordley Hall 2042, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received February 08, 1983.

origin: Asia. developer country: United States. origin institute: Oregon State University, Research Station, Medford, Oregon. pedigree: Probably a seedling selection from an Asian seedlot. Perennial. Breeding Material. Plant.

PI 541022 to 541024. Pyrus calleryana Decne. ROSACEAE Callery Pear

Donated by: Hill Crest Nursery, Missouri, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

PI 541022 to 541024-continued

- PI 541022 origin: United States. pedigree: Collected from the wild in Missouri. local name: Ornamental Pear. collected: January 1976. Perennial. Wild. Seed.
- PI 541023 origin: United States. pedigree: Collected from the wild in Missouri. local name: Ornamental Pear. collected:
 January 1976. Perennial. Wild. Seed.
- PI 541024 origin: United States. origin institute: Howell County Nursery, West Plains, Missouri. pedigree: Open pollinated. local name: Ornamental Pear. collected: October 15, 1963. Perennial. Breeding Material. Seed.
- PI 541025 to 541079. Pyrus calleryana Decne. ROSACEAE Callery Pear

Donated by: Westwood, Dr. M.N., Oregon State University, NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

- PI 541025 origin: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OPR 268. pedigree: P. calleryana seedling selection. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541026 origin: United States. origin institute: Howell County Nursery, Missouri. Perennial. Breeding Material. Plant.
- PI 541027 origin: United States. origin institute: Ozark Orchards. local name: Ornamental Pear. Perennial. Breeding Material. Plant.
- PI 541028 origin: Asia. pedigree: Collected from the wild in Asia. Perennial. Wild. Seed.
- PI 541029 origin: Japan. pedigree: Collected from the wild in Japan. collected: 1965. Perennial. Wild. Seed.
- PI 541030 origin: Asia. pedigree: Collected from the wild in Asia. Perennial. Wild. Seed.
- PI 541031 origin: Asia. pedigree: Collected from the wild in Asia. Perennial. Wild. Seed.
- PI 541032 origin: Asia. pedigree: Collected from the wild in Asia. Perennial. Wild. Seed.
- PI 541033 origin: Asia. pedigree: Collected from the wild in Asia. Perennial. Wild. Seed.

PI 541025 to 541079-continued

- PI 541034 origin: Asia. pedigree: Collected from the wild in Asia. Perennial. Wild. Seed.
- PI 541035 origin: Asia. pedigree: Collected from the wild in Asia. Perennial. Wild. Seed.
- PI 541036 origin: Asia. pedigree: Collected from the wild in Asia. Perennial. Wild. Seed.
- PI 541037 origin: Asia. pedigree: Collected from the wild in Asia. Perennial. Wild. Seed.
- PI 541038 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seed from seedling selection from Asian seedlot. Perennial. Breeding Material. Seed.
- PI 541039 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seed from seedling selection from Asian seedlot. Perennial. Breeding Material. Seed.
- PI 541040 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seed from seedling selection from Asian seedlot. Perennial. Breeding Material. Seed.
- PI 541041 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seed from seedling selection from Asian seedlot. Perennial. Breeding Material. Seed.
- PI 541042 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seed from seedling selection from Asian seedlot. local name: Ornamental Pear. Perennial. Breeding Material. Seed.
- PI 541043 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seed from seedling selection from Asian seedlot. Perennial. Breeding Material. Seed.

PI 541025 to 541079-continued

- PI 541044 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seed from seedling selection from Asian seedlot. local name: Ornamental Pear. Perennial. Breeding Material. Seed.
- PI 541045 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seed from seedling selection from Asian seedlot. Perennial. Breeding Material. Seed.
- PI 541046 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seed from seedling selection from Asian seedlot. Perennial. Breeding Material. Seed.
- PI 541047 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seed from seedling selection from Asian seedlot. Perennial. Breeding Material. Seed.
- PI 541048 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seed from seedling selection from Asian seedlot. local name: Ornamental Pear. Perennial. Breeding Material. Seed.
- PI 541049 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seed from seedling selection from Asian seedlot. Perennial. Breeding Material. Seed.
- PI 541050 origin: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection. Perennial. Breeding Material. Plant.
- PI 541051 origin: United States. origin institute: Whiterock Nursery, Texas. pedigree: Seedling selection. local name: Ornamental Pear. Perennial. Breeding Material. Plant.
- PI 541052 origin: United States. origin institute: Southern Nursery, Tennessee. pedigree: Seedling selection. Perennial. Breeding Material. Plant.

- PI 541053 origin: China. developer country: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OSU-2. pedigree: Seedling selection from seed collected in China. local name: Ornamental Pear. Perennial. Breeding Material. Plant.
- PI 541054 origin: China. developer country: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OSU-3. pedigree: Seedling selection from seed collected in China. local name: Ornamental Pear. Perennial. Breeding Material. Plant.
- PI 541055 origin: China. developer country: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OSU-5. pedigree: Seedling selection from seedlot collected wild in China. local name: Ornamental Pear. Perennial. Breeding Material. Plant.
- PI 541056 origin: China. developer country: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OSU-6. pedigree: Seedling selection from seed collected in China. Perennial. Breeding Material. Plant.
- PI 541057 origin: China. developer country: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OSU-7. pedigree: Seedling selection from seed collected in China. Perennial. Breeding Material. Plant.
- PI 541058 origin: China. developer country: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OSU-8. pedigree: Seedling selection from seed collected in China. local name: Ornamental Pear. Perennial. Breeding Material. Plant.
- PI 541059 origin: China. developer country: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OSU-9. pedigree: Seedling selection from seed collected in China. Perennial. Breeding Material. Plant.
- PI 541060 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection from Asian seedlot. local name: Ornamental Pear. Perennial. Breeding Material. Plant.

- PI 541061 origin: Asia. developer country: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. pedigree: Seedling selection from Asian seedlot. Perennial. Breeding Material. Plant.
- PI 541062 **origin:** United States. **origin institute:** Southern Nursery, Tennessee. **pedigree:** Seedling selection. Perennial. Breeding Material. Plant.
- PI 541063 origin: United States. origin institute: Southern Nursery, Tennessee. Perennial. Breeding Material. Plant.
- PI 541064 origin: United States. origin institute: Howell County Nursery, Missouri. Perennial. Breeding Material. Plant.
- PI 541065 origin: United States. origin institute: Howell County Nursery, Missouri. Perennial. Breeding Material. Plant.
- PI 541066 origin: United States. origin institute: Oregon State
 University, Experiment Station, Medford, Oregon.
 cultivar: OPR 125. pedigree: Seedling selection. local
 name: Rootstock Pear. Perennial. Breeding Material.
 Plant.
- PI 541067 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection from Asian seedlot. local name: Ornamental Pear. Perennial. Breeding Material. Plant.
- PI 541068 origin: United States. origin institute: Oregon State
 University, Experiment Station, Crown Point Orchard,
 Medford, Oregon. cultivar: OPR 193. pedigree: Seedling
 selection. local name: Rootstock Pear. Perennial.
 Breeding Material. Plant.
- PI 541069 origin: United States. origin institute: Oregon State
 University, Exp. Station, Southern Nursery, Medford,
 Oregon. cultivar: OPR 255. pedigree: Seedling selection
 from seed from Southern Nursery. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541070 origin: United States. origin institute: Oregon State
 University, Exp. Station, Crown Point Orchard, Medford,
 Oregon. cultivar: OPR 249. pedigree: Seedling
 selection. local name: Rootstock Pear. Perennial.
 Breeding Material. Plant.

- PI 541071 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection from Asian seedlot. Perennial. Breeding Material. Plant.
- PI 541072 origin: United States. origin institute: Oregon State University, Exp. Station, Crown Point Orchard, Medford, Oregon. cultivar: OPR 177. pedigree: Seedling selection. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541073 origin: Asia. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection from Asian seedlot. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541074 origin: United States. origin institute: Oregon State University, Exp. Station, Crown Point Orchard, Medford, Oregon. cultivar: OPR 191. pedigree: Seedling selection. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541075 origin: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. cultivar: Autumn Blaze. pedigree: Seedling selection from seed collected in China by Reimer. local name: Ornamental Pear. other id: Plant Patent 4591. group: PLNT. restricted: PAT. Perennial. Cultivar. Plant.
- PI 541076 origin: United States. origin institute: Oregon State University, Exp. Station, Crown Point Orchard, Medford, Oregon. cultivar: OPR 195. pedigree: Seedling selection. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541077 origin: United States. pedigree: Seedling selection. Perennial. Breeding Material. Plant.
- PI 541078 origin: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection B. Perennial. Breeding Material. Plant.
- PI 541079 origin: United States. origin institute: Oregon State University, Exp. Station, Crown Point Orchard, Medford, Oregon. cultivar: OPR 132. pedigree: Seedling selection. local name: Rootstock Pear. Perennial. Breeding Material. Plant.

PI 541080. Pyrus calleryana Decne. ROSACEAE Callery Pear

Donated by: The Morton Arboretum, Route 53, Lisle, Illinois, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

origin: United States. pedigree: Open pollinated from botanical collection. local name: Ornamental Pear. collected: October 03, 1966. Perennial. Cultivated. Seed.

PI 541081. Pyrus calleryana Decne. ROSACEAE Callery Pear

Donated by: Whiterock Nursery, Austin, Texas, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

origin: United States. origin institute: Whiterock Nursery, Austin, Texas. pedigree: Open pollinated. local name: Ornamental Pear. collected: 1966. Perennial. Breeding Material. Seed.

PI 541082 to 541084. Pyrus calleryana Decne. ROSACEAE Callery Pear

Donated by: Westwood, Dr. M.N., Oregon State University, NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received January 22, 1986.

- PI 541082 origin: United States. origin institute: Oregon State
 University, Experiment Station, Crown Point Orchard,
 Medford, Oregon. local name: Rootstock Pear. Perennial.
 Breeding Material. Cutting.
- PI 541083 origin: China. developer country: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OSU-10. pedigree: Seedling selection from seedlot collected in China. Perennial. Breeding Material. Cutting.
- PI 541084 origin: United States. origin institute: Naumes Orchard, Medford, Oregon. pedigree: Seedling selection from OP seed. local name: Rootstock Pear. Perennial. Breeding Material. Cutting.
- PI 541085. Pyrus calleryana Decne. ROSACEAE Callery Pear

Donated by: Westigard, Dr. P. H., Oregon State University, Southern Oregon Experiment Station, 569 Hanley Road, Medford, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received February 28, 1986.

PI 541085-continued

origin: United States. origin institute: Oregon State University, Experiment Station, Crown Point Orchard, Medford, Oregon. cultivar: OPR 135. pedigree: Seedling selection. local name: Rootstock Pear. Perennial. Breeding Material. Plant.

PI 541086. Pyrus calleryana Decne. ROSACEAE Callery Pear

Donated by: Makino, Takahiro, Shizuoka Agricutural Experiment Station, Iwate Shizuoka, Japan. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received January 08, 1987.

origin: Japan. origin institute: Shizuoka Ag. Exp. Sta., Tomigaoka Iwata, Shizuoka 438. Perennial. Breeding Material. Seed.

PI 541087. Pyrus calleryana Decne. ROSACEAE Callery Pear

Donated by: Hortus Botanicus Acad. Sci., Taschkent, Uzbek Republic, Soviet Union. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received April 15, 1987.

origin: USSR. pedigree: Open-pollinated from botanical
collection. Perennial. Cultivated. Seed.

PI 541088. Pyrus calleryana Decne. ROSACEAE Callery Pear

Donated by: Westwood, Dr. M.N., Oregon State University, NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received February 19, 1988.

origin: United States. origin institute: Oregon State University, Experiment Station, Crown Point Orchard, Medford, Oregon. pedigree: Probably a seedling selection. local name: Ornamental Pear. Perennial. Breeding Material. Cutting.

PI 541089 to 541101. Pyrus calleryana Decne. ROSACEAE Callery Pear

Donated by: Sugar, Dr. David, Oregon State University, Southern Oregon Experiment Station, 569 Hanley Road, Medford, Oregon, United States. **remarks:** Pyrus accessions at NCGR-Corvallis being numbered. Received February 24, 1988.

PI 541089 to 541101-continued

- PI 541089 origin: United States. origin institute: Oregon State
 University, Experiment Station, Crown Point Orchard,
 Medford, Oregon. cultivar: OPR 156. pedigree: Unknown.
 local name: Rootstock Pear. Perennial. Breeding
 Material. Cutting.
- PI 541090 origin: United States. origin institute: Oregon State
 University, Experiment Station, Crown Point Orchard,
 Medford, Oregon. cultivar: OPR 130. pedigree: Seedling
 selection. local name: Rootstock Pear. Perennial.
 Breeding Material. Cutting.
- PI 541091 origin: United States. origin institute: Oregon State
 University, Experiment Station, Crown Point Orchard,
 Medford, Oregon. cultivar: OPR 186. pedigree: Unknown.
 local name: Rootstock Pear. Perennial. Breeding
 Material. Cutting.
- PI 541092 origin: United States. origin institute: Oregon State
 University, Experiment Station, Crown Point Orchard,
 Medford, Oregon. cultivar: OPR 187. pedigree: Unknown.
 local name: Rootstock Pear. Perennial. Breeding
 Material. Cutting.
- PI 541093 origin: United States. origin institute: Oregon State
 University, Experiment Station, Crown Point Orchard,
 Medford, Oregon. cultivar: OPR 135. pedigree: Seedling
 selection. local name: Rootstock Pear. Perennial.
 Breeding Material. Cutting.
- PI 541094 origin: United States. origin institute: Oregon State
 University, Experiment Station, Crown Point Orchard,
 Medford, Oregon. cultivar: OPR 138. pedigree: Seedling
 selection. local name: Rootstock Pear. Perennial.
 Breeding Material. Cutting.
- PI 541095 origin: United States. origin institute: Oregon State University, Exp. Station, Crown Point Orchard, Medford, Oregon. cultivar: OPR 258. pedigree: Unknown. local name: Rootstock Pear. Perennial. Breeding Material. Cutting.
- PI 541096 origin: United States. origin institute: Oregon State
 University, Experiment Station, Crown Point Orchard,
 Medford, Oregon. cultivar: OPR 205. pedigree: Unknown.
 local name: Rootstock Pear. Perennial. Breeding
 Material. Cutting.

PI 541089 to 541101-continued

- PI 541097 origin: United States. origin institute: Oregon State
 University, Experiment Station, Crown Point Orchard,
 Medford, Oregon. cultivar: OPR 215. pedigree: Unknown.
 local name: Rootstock Pear. Perennial. Breeding
 Material. Cutting.
- PI 541098 origin: United States. origin institute: Oregon State
 University, Experiment Station, Crown Point Orchard,
 Medford, Oregon. cultivar: OPR 220. pedigree: Unknown.
 local name: Rootstock Pear. Perennial. Breeding
 Material. Cutting.
- PI 541099 origin: United States. origin institute: Oregon State
 University, Experiment Station, Crown Point Orchard,
 Medford, Oregon. cultivar: OPR 233. pedigree: Unknown.
 local name: Rootstock Pear. Perennial. Breeding
 Material. Cutting.
- PI 541100 origin: United States. origin institute: Oregon State
 University, Experiment Station, Crown Point Orchard,
 Medford, Oregon. cultivar: OPR 201. pedigree: Unknown.
 local name: Rootstock Pear. Perennial. Breeding
 Material. Cutting.
- PI 541101 origin: United States. origin institute: Oregon State
 University, Experiment Station, Crown Point Orchard,
 Medford, Oregon. cultivar: OPR 211. pedigree: Unknown.
 local name: Rootstock Pear. Perennial. Breeding
 Material. Cutting.
- PI 541102 to 541109. Pyrus calleryana Decne. ROSACEAE Callery Pear

Donated by: Oregon State University, Department of Horticulture, Lewis-Brown Farm, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received December 14, 1988.

- PI 541102 origin: United States. cultivar: Kings Rd. Late Red. local name: Ornamental Pear. Perennial. Cultivar. Plant.
- PI 541103 origin: United States. developer country: United States. origin institute: USDA/ARS, Crops Research Division, Beltsville, Maryland. cultivar: Bradford. pedigree: Seedling selection from seedlot PI 47261. local name: Ornamental Pear. Perennial. Cultivar. Plant.
- PI 541104 origin: United States. cultivar: Redspire. pedigree:
 Seedling selection from cultivar Bradford. local name:
 Ornamental Pear. Perennial. Cultivar. Plant.

- PI 541102 to 541109-continued
 - PI 541105 origin: United States. cultivar: Chanticleer. local name: Ornamental Pear. Perennial. Cultivar. Plant.
 - PI 541106 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. pedigree: Seedling selection. local name: Ornamental Pear. Perennial. Breeding Material. Plant.
 - PI 541107 origin: United States. cultivar: Grant St. Yellow. local name: Ornamental Pear. Perennial. Cultivar. Plant.
 - PI 541108 origin: United States. developer country: United States. origin institute: Carlisle Nursery, Independence, Kentucky. cultivar: Aristocrat. pedigree: Seedling selection from seedlot F. Meyer collected in China. local name: Ornamental Pear. Perennial. Cultivar. Plant.
 - PI 541109 origin: UNCERTAIN. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. local name: Ornamental Pear. Perennial. Breeding Material. Plant.
- PI 541110 to 541111. Pyrus calleryana Decne. ROSACEAE Callery Pear

Donated by: Westwood, Dr. M.N., Oregon State University, NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received August 21, 1989.

- PI 541110 origin: China. developer country: United States. origin institute: Oregon State University, Experiment Station, Talent, Oregon. cultivar: OSU-6. pedigree: Seedling selection from seed collected in China. Perennial. Breeding Material. Plant.
- PI 541111 origin: China. developer country: United States. origin institute: Oergon State University, Experiment Station, Talent, Oregon. cultivar: OSU-9. pedigree: Seedling selection from seedlot collected in China. Perennial. Breeding Material. Plant.
- PI 541112. Pyrus calleryana f. graciliflora Rehder ROSACEAE Callery Pear

Donated by: Westwood, Dr. M.N., Oregon State University, NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

PI 541112-continued

origin: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Open pollinated. local name: Ornamental Pear. collected: October 03, 1966. Perennial. Breeding Material. Seed.

PI 541113. Pyrus calleryana f. graciliflora Rehder ROSACEAE Callery Pear

Donated by: The Morton Arboretum, Route 53, Lisle, Illinois, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

origin: United States. pedigree: Open pollinated from botanical collection. local name: Ornamental Pear. Perennial. Cultivated. Seed.

PI 541114 to 541298. Pyrus communis L. ROSACEAE Pear

Donated by: Lombard, Dr. Porter, Oregon State University, Department of Horticulture, Cordley Hall 2042, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received February 21, 1981.

- PI 541114 origin: United States. developer country: France. cultivar: Allexandrine Douillard. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541115 origin: United States. developer country: United States. cultivar: Ames. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541116 origin: United States. origin institute: Oregon State
 University, Experiment Station, Medford, Oregon.
 cultivar: Anjou 4n. pedigree: 4n form of Anjou,
 selection. Perennial. Cultivar. Plant.
- PI 541117 origin: United States. cultivar: Anjou Blush. Perennial. Cultivar. Plant.
- PI 541118 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. cultivar: Anjou Dwarf. Perennial. Cultivar. Plant.
- PI 541119 origin: United States. developer country: United States. origin institute: Cornell University, Agricultural Experiment Station, Geneva, New York. cultivar: Aurora. pedigree: Margherite Marillat x Bartlett. Perennial. Cultivar. Plant.

- PI 541120 origin: United States. developer country: United States. cultivar: Ayer. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541121 origin: United States. cultivar: Bartlett Bagley Russet. Perennial. Cultivar. Plant.
- PI 541122 origin: United States. developer country: France. cultivar: Barillet Deschamp. Perennial. Cultivar. Plant.
- PI 541123 origin: United States. developer country: United Kingdom. cultivar: Barland. pedigree: Chance seedling. local name: Perry Pear. Perennial. Cultivar. Plant.
- PI 541124 origin: United States. developer country: United Kingdom. cultivar: Barnet. pedigree: Unknown. local name: Perry Pear. Perennial. Cultivar. Plant.
- PI 541125 origin: United States. developer country: France. cultivar: Belle de Beugny. Perennial. Cultivar. Plant.
- PI 541126 origin: United States. developer country: France. cultivar: Belle de Feron. Perennial. Cultivar. Plant.
- PI 541127 origin: United States. developer country: Asia Minor. cultivar: Bergamotte d'Automne. pedigree: Unknown, ancient cultivar. Perennial. Cultivar. Plant.
- PI 541128 origin: United States. cultivar: Bergamote d'Ete. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541129 origin: United States. developer country: France. cultivar: Bergamotte Sageret. pedigree: OP seedling of an unnamed P. communis variety. Perennial. Cultivar. Plant.
- PI 541130 origin: United States. developer country: France.
 cultivar: Besi d'Hery. pedigree: Unknown. Perennial.
 Cultivar. Plant.
- PI 541131 origin: United States. developer country: France. cultivar: Besi de La Motte. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541132 origin: United States. developer country: France.
 origin institute: Dept. Loire et Cher, Oregon. cultivar:
 Beurre Alexandre Lucas. pedigree: Chance seedling.
 Perennial. Cultivar. Plant.

- PI 541133 origin: United States. developer country: France. cultivar: Beurre Clairgeau. pedigree: Seedling of cultivar Duchess D'Angouleme. Perennial. Cultivar. Plant.
- PI 541134 origin: United States. developer country: France. cultivar: Beurre d'Amanlis. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541135 origin: United States. developer country: France. cultivar: Beurre d'Amanlis Panachee. pedigree: Beurre d'Amanlis sport. Perennial. Cultivar. Plant.
- PI 541136 origin: United States. developer country: United Kingdom. cultivar: Beurre d'Angleterre. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541137 origin: United States. developer country: France. cultivar: Beurre de Bollwiller. Perennial. Cultivar. Plant.
- PI 541138 origin: United States. developer country: Belgium. cultivar: Beurre de Ghelin. Perennial. Cultivar. Plant.
- PI 541139 origin: United States. developer country: France. cultivar: Beurre de Nantes. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541140 origin: United States. developer country: France. cultivar: Beurre de Saint Nicolas. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541141 origin: United States. developer country: Belgium. cultivar: Beurre Diel. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541142 origin: United States. developer country: Belgium. cultivar: Beurre Dumont. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541143 origin: United States. developer country: France. cultivar: Beurre Fouqueray. Perennial. Cultivar. Plant.
- PI 541144 origin: United States. developer country: France. cultivar: Beurre Giffard. pedigree: Chance P. communis seedling. Perennial. Cultivar. Plant.
- PI 541145 origin: United States. developer country: France. cultivar: Beurre Gris. pedigree: Unknown. Perennial. Cultivar. Plant.

- PI 541146 origin: United States. developer country: France. cultivar: Beurre Gris d'Hiver Nouveau. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541147 origin: United States. developer country: France. cultivar: Beurre Hardy. Perennial. Cultivar. Plant.
- PI 541148 origin: United States. developer country: France. cultivar: Beurre Millet. Perennial. Cultivar. Plant.
- PI 541149 origin: United States. developer country: Belgium. cultivar: Beurre Phillippe Delfosse. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541150 origin: United States. developer country: France. cultivar: Beurre Superfin. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541151 origin: United States. developer country: United Kingdom. cultivar: Blakeney Red. local name: Perry Pear. Perennial. Cultivar. Plant.
- PI 541152 origin: United States. developer country: France. cultivar: Bon Chretien Bonnamour. Perennial. Cultivar. Plant.
- PI 541153 origin: United States. developer country: United States. cultivar: Buffum. pedigree: Possibly a seedling of cultivar White Doyenne. Perennial. Cultivar. Plant.
- PI 541154 origin: United States. developer country: United States. cultivar: Burkett. Perennial. Cultivar. Plant.
- PI 541155 origin: United States. developer country: Belgium. cultivar: Doyenne Boussock. Perennial. Cultivar. Plant.
- PI 541156 origin: United States. developer country: United Kingdom. cultivar: Butt. local name: Perry Pear. Perennial. Cultivar. Plant.
- PI 541157 origin: United States. developer country: United States. origin institute: University of California, Davis, California. cultivar: California. pedigree: Max-Red Bartlett x Comice. Perennial. Cultivar. Plant.
- PI 541158 origin: United States. origin institute: Oregon State
 University, Agricultural Experiment Station, Medford,
 Oregon. cultivar: Canal Pear. pedigree: Forelle x Max
 Red Bartlett. Perennial. Cultivar. Plant.

- PI 541159 Pyrus hybrid ROSACEAE Pear origin: United States. developer country: United Kingdom. cultivar: Canner. pedigree: P. pyrifolia hybrid, possibly a seedling of cv. Kieffer. Perennial. Cultivar. Plant.
- PI 541160 Pyrus hybrid ROSACEAE Pear origin: United States. developer country: United States. origin institute: Cornell University, Agricultural Experiment Station, Geneva, New York. cultivar: Cayuga. pedigree: OP Seedling of cultivar Seckel. Perennial. Cultivar. Plant.
- PI 541161 origin: United States. developer country: United States. origin institute: Cornell University, Agricultural Experiment Station, Geneva, New York. cultivar: Chapin. pedigree: Seedling of cultivar Seckel. Perennial. Cultivar. Plant.
- PI 541162 origin: United States. developer country: Belgium. cultivar: Chasseurs. Perennial. Cultivar. Plant.
- PI 541163 origin: United States. developer country: Europe. cultivar: Citron de Carmes. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541164 origin: United States. developer country: United States. cultivar: Clapp Favorite. pedigree: Flemish Beauty x Bartlett. Perennial. Cultivar. Plant.
- PI 541165 origin: United States. developer country: United States. cultivar: Colonel Wilder. pedigree: Seedling selection. Perennial. Cultivar. Plant.
- PI 541166 origin: United States. developer country: United States. cultivar: Columbia. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541167 origin: United States. developer country: France. cultivar: Comte de Lambertye. pedigree: Seedling of cultivar Beurre Superfin. Perennial. Cultivar. Plant.
- PI 541168 origin: United States. developer country: United Kingdom. origin institute: Thomas Rivers and Sons LTD, Sawbridgeworth, England. cultivar: Conference. pedigree: Seedling of cultivar Leon Leclerc de Laval. Perennial. Cultivar. Plant.
- PI 541169 origin: United States. developer country: United States. cultivar: Dana Hovey. pedigree: Seckel x Winter Nelis. Perennial. Cultivar. Plant.

- PI 541170 origin: United States. developer country: United States. origin institute: USDA/ARS, BARC, Beltsville, Maryland. cultivar: Dawn. pedigree: (Barseck x Bartlett) x Comice. Perennial. Cultivar. Plant.
- PI 541171 origin: United States. developer country: France. cultivar: Delices d'Avril. Perennial. Cultivar. Plant.
- PI 541172 origin: United States. developer country: United States. cultivar: Devoe. pedigree: Possibly a seedling of cultivar Clapp Favorite. Perennial. Cultivar. Plant.
- PI 541173 origin: United States. developer country: France. cultivar: Docteur Desportes. Perennial. Cultivar. Plant.
- PI 541174 origin: United States. developer country: United States. cultivar: Dorset. pedigree: Seedling selection. Perennial. Cultivar. Plant.
- PI 541175 origin: United States. developer country: France. cultivar: Doyenne de la Grifferaye. pedigree: Seedling selection. Perennial. Cultivar. Plant.
- PI 541176 origin: United States. developer country: France. cultivar: Doyenne Goubault. pedigree: Seedling selection. Perennial. Cultivar. Plant.
- PI 541177 origin: United States. developer country: France. cultivar: Doyenne Madame Levavasseur. Perennial. Cultivar. Plant.
- PI 541178 origin: United States. developer country: France.
 origin institute: Baltet Bros. Nurseries, Troyes, Oregon.
 cultivar: Docteur Jules Guyot. pedigree: Unknown.
 Perennial. Cultivar. Plant.
- PI 541179 origin: United States. developer country: France. cultivar: Duchesse Bronzee. pedigree: Duchesse d'Angouleme sport. Perennial. Cultivar. Plant.
- PI 541180 origin: United States. developer country: France.
 origin institute: Commune of Saint-Herblain, Dept. of
 Loire Inferieure, Oregon. cultivar: Duchesse de Berry
 d'Ete. pedigree: Seedling selection. Perennial.
 Cultivar. Plant.
- PI 541181 origin: United States. developer country: France. cultivar: Duchesse de Brissac. pedigree: Seedling selection. Perennial. Cultivar. Plant.

- PI 541182 origin: United States. developer country: France.
 cultivar: Duchesse de Mouchy. pedigree: Chance seedling.
 Perennial. Cultivar. Plant.
- PI 541183 origin: United States. developer country: United States. cultivar: Early Harvest. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541184 origin: United States. developer country: United States. origin institute: Cornell University, Agricultural Experiment Station, Geneva, New York. cultivar: Early Seckel. pedigree: OP seedling of cultivar Seckel. Perennial. Cultivar. Plant.
- PI 541185 origin: United States. developer country: Belgium. cultivar: Elizabeth. pedigree: Seedling selection. Perennial. Cultivar. Plant.
- PI 541186 origin: United States. developer country: Canada. origin institute: Canada Experimental Farms, Oregon. cultivar: Eva Baltet. pedigree: Bartlett x Flemish Beauty. Perennial. Cultivar. Plant.
- PI 541187 origin: United States. developer country: United States. cultivar: Ewart. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541188 origin: United States. cultivar: Farmingdale. pedigree: Seedling selection. Perennial. Cultivar. Plant.
- PI 541189 origin: United States. developer country: Belgium. cultivar: Flemish Beauty. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541190 origin: United States. developer country: France.
 cultivar: Fondante de Moulins Lille. pedigree: Seedling
 of cultivar Napoleon. Perennial. Cultivar. Plant.
- PI 541191 origin: United States. developer country: Germany. cultivar: Forelle. Perennial. Cultivar. Plant.
- PI 541192 origin: United States. developer country: United States. cultivar: Frederick Clapp. pedigree: Urbaniste x Beurre Superfin. Perennial. Cultivar. Plant.
- PI 541193 origin: France. developer country: United States.
 origin institute: Oregon State University, Experiment
 Station, Medford, Oregon. cultivar: French Resistant No.
 1. pedigree: Seedling selection. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.

- PI 541194 origin: United States. developer country: France. cultivar: General Galliene. Perennial. Cultivar. Plant.
- PI 541195 origin: United States. developer country: United Kingdom. cultivar: Gin. local name: Perry Pear. Perennial. Cultivar. Plant.
- PI 541196 origin: United States. developer country: United States. origin institute: Cornell University, Agricultural Experiment Station, Geneva, New York. cultivar: Gorham. pedigree: Bartlett x Josephine de Malines. Perennial. Cultivar. Plant.
- PI 541197 origin: United States. cultivar: Grand Champion.
 pedigree: Russet Gorham sport. Perennial. Cultivar.
 Plant.
- PI 541198 origin: United States. developer country: France. cultivar: Grosse Louise. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541199 origin: United States. developer country: Denmark. cultivar: Graf Moltke. Perennial. Cultivar. Plant.
- PI 541200 origin: Canada. origin institute: Agriculture Canada, Experiment Station, Harrow, Ontario. cultivar: H 6831/1.12. pedigree: Seckel x Bartlett second test selection. Perennial. Breeding Material. Plant.
- PI 541201 origin: Canada. origin institute: Agriculture Canada, Experiment Station, Vineland, Ontario. cultivar: H.E.S. 25021. pedigree: Unknown. Perennial. Breeding Material. Plant.
- PI 541202 origin: Canada. origin institute: Agriculture Canada, Experiment Station, Harrow, Ontario. cultivar: HW 601. pedigree: Bartlett x Maxine second test selection. Perennial. Breeding Material. Plant.
- PI 541203 origin: United States. developer country: Canada.
 origin institute: Agriculture Canada, Research Station,
 Harrow, Ontario. cultivar: Harvest Queen. pedigree:
 Bartlett x (Barseck x Bartlett). Perennial. Cultivar.
 Plant.
- PI 541204 origin: United States. developer country: Germany. cultivar: Hofrath's Birne. Perennial. Cultivar. Plant.
- PI 541205 origin: United States. developer country: United Kingdom. cultivar: Hendre Huffcap. local name: Perry Pear. Perennial. Cultivar. Plant.

- PI 541206 origin: United States. developer country: France. cultivar: Henri Desportes. pedigree: Seedling selection. Perennial. Cultivar. Plant.
- PI 541207 origin: United States. developer country: United States. origin institute: Cornell University, Agricultural Experiment Station, Geneva, New York. cultivar: Highland. pedigree: Bartlett x Comice. Perennial. Cultivar. Plant.
- PI 541208 origin: United States. developer country: United States. origin institute: University of Tennessee, Agricultural Experiment Station, Knoxville, Tennessee. cultivar: Hoskins. pedigree: Seckel x Late Faulkner. Perennial. Cultivar. Plant.
- PI 541209 origin: United States. developer country: France. cultivar: Hourdequin. Perennial. Cultivar. Plant.
- PI 541210 origin: United States. developer country: United States. cultivar: Howell Sport. pedigree: Seedling of cultivar Jonah. Perennial. Cultivar. Plant.
- PI 541211 origin: United States. developer country: United States. cultivar: Lady Clapp. pedigree: Probably a seedling selection. Perennial. Cultivar. Plant.
- PI 541212 origin: United States. developer country: United States. cultivar: Lawrence. pedigree: St. Germain x White Doyenne. Perennial. Cultivar. Plant.
- PI 541213 origin: United States. developer country: United States. cultivar: Lawson. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541214 origin: United States. developer country: Europe. cultivar: Lehoux Grignon. pedigree: Uncertain. Perennial. Cultivar. Plant.
- PI 541215 origin: United States. developer country: USSR. cultivar: Lemon. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541216 origin: United States. developer country: France. cultivar: Lieutenant Poidevin. pedigree: Seedling selection. Perennial. Cultivar. Plant.
- PI 541217 origin: United States. developer country: United States. cultivar: Lincoln. pedigree: Chance seedling. Perennial. Cultivar. Plant.

- PI 541218 origin: United States. developer country: Europe.
 cultivar: Longue Verte. pedigree: Uncertain. Perennial.
 Cultivar. Plant.
- PI 541219 origin: United States. developer country: United States. cultivar: Longworth. Perennial. Cultivar. Plant.
- PI 541220 origin: United States. developer country: France. cultivar: Louise Bonne de Jersey. pedigree: Seedling selection. Perennial. Cultivar. Plant.
- PI 541221 origin: United States. developer country: France.
 cultivar: Louis Vilmorin. pedigree: Seedling of cultivar
 Beurre Clairgeau. Perennial. Cultivar. Plant.
- PI 541222 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. cultivar: Lowry No. 1. Perennial. Cultivar. Plant.
- PI 541223 origin: United States. developer country: United States. cultivar: Lucy Duke. pedigree: Bartlett x (Winter Nelis?). Perennial. Cultivar. Plant.
- PI 541224 origin: United States. developer country: France. cultivar: Madame Andre Leroy. pedigree: Seedling selection. Perennial. Cultivar. Plant.
- PI 541225 origin: United States. developer country: France. cultivar: Madame Favre. Perennial. Cultivar. Plant.
- PI 541226 origin: United States. developer country: France. cultivar: Madame Lye Baltet. Perennial. Cultivar. Plant.
- PI 541227 origin: United States. developer country: France. cultivar: Madame Treyve. pedigree: Seedling selection. Perennial. Cultivar. Plant.
- PI 541228 origin: United States. cultivar: Marchland. Perennial. Cultivar. Plant.
- PI 541229 origin: United States. developer country: France. cultivar: Marguerite Marillat. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541230 origin: United States. developer country: Belgium. cultivar: Marie Louise Marillat. pedigree: Seedling selection. Perennial. Cultivar. Plant.
- PI 541231 origin: United States. developer country: United States. cultivar: Maxine. pedigree: Chance seedling. Perennial. Cultivar. Plant.

- PI 541232 origin: United States. developer country: United States. cultivar: Mendel. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541233 origin: United States. developer country: France. cultivar: Messire Jean. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541234 origin: United States. developer country: France. cultivar: Monchallard. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541235 origin: United States. developer country: France. cultivar: Notaire Lepin. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541236 origin: United States. cultivar: Bartlett Nye Russet. pedigree: Bartlett bud mutation. Perennial. Cultivar. Plant.
- PI 541237 origin: United States. origin institute: Oregon State
 University, Experiment Station, Medford, Oregon.
 cultivar: OH 20. pedigree: Old Home seedling selection,
 probably hybrid w/pyrifolia. local name: Rootstock Pear.
 Perennial. Cultivar. Plant.
- PI 541238 origin: United States. origin institute: Oregon State
 University, Experiment Station, Medford, Oregon.
 cultivar: OH 50. pedigree: Old Home seedling selection.
 local name: Rootstock Pear. Perennial. Cultivar.
 Plant.
- PI 541239 origin: United States. developer country: USSR. cultivar: Orel No. 15. Perennial. Cultivar. Plant.
- PI 541240 origin: United States. developer country: United States. cultivar: Patrick Barry. pedigree: Seedling of cultivar Belle Lucrative. Perennial. Cultivar. Plant.
- PI 541241 origin: United States. developer country: United States. cultivar: Patten. pedigree: Orel 15 x Anjou. Perennial. Cultivar. Plant.
- PI 541242 origin: United States. developer country: France.
 cultivar: Petit Blanquet. pedigree: Unknown. Perennial.
 Cultivar. Plant.
- PI 541243 origin: United States. developer country: United Kingdom. cultivar: Pitmaston Duchess. pedigree: Duchess d'Angouleme x Glou Marceau. Perennial. Cultivar. Plant.

- PI 541244 origin: United States. developer country: France. cultivar: Precoce de Trevoux. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541245 origin: United States. developer country: Europe. cultivar: President Loubet. pedigree: Uncertain. Perennial. Cultivar. Plant.
- PI 541246 origin: United States. developer country: France. cultivar: Professor Grosdemage. Perennial. Cultivar. Plant.
- PI 541247 origin: United States. developer country: United States. origin institute: Cornell University, Agricultural Experiment Station, Geneva, New York. cultivar: Pulteney. pedigree: Winter Nelis x Russet Bartlett. Perennial. Cultivar. Plant.
- PI 541248 origin: United States. origin institute: Oregon State
 University, Experiment Station, Medford, Oregon.
 cultivar: Anjou Gebhart Red. pedigree: Anjou, red bud
 mutation. Perennial. Cultivar. Plant.
- PI 541249 origin: United States. developer country: United States. cultivar: Bartlett Max Red. pedigree: Bartlett bud mutation. Perennial. Cultivar. Cutting.
- PI 541250 origin: United States. origin institute: Oregon State
 University, Experiment Station, Medford, Oregon.
 cultivar: Reimer's Hybrid. Perennial. Cultivar. Plant.
- PI 541251 origin: United States. developer country: United States. cultivar: Reliance. pedigree: Seedling selection. Perennial. Cultivar. Plant.
- PI 541252 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. cultivar: Rogue Red. pedigree: Comice x (Seckel x Farmingdale sdlg.). Perennial. Cultivar. Plant.
- PI 541253 origin: United States. developer country: Germany.
 cultivar: Roi Charles de Wurttemberg. pedigree: Seedling
 of cultivar Beurre Clairgeau. Perennial. Cultivar.
 Plant.
- PI 541254 origin: United States. developer country: France. cultivar: Rosee de Juillet. Perennial. Cultivar. Plant.

- PI 541255 origin: United States. developer country: United States. cultivar: Bartlett Rosired. pedigree: Bartlett bud mutation. other id: Plant Patent ?. group: PLNT. Perennial. Cultivar. Plant.
- PI 541256 origin: United States. developer country: Europe. cultivar: Rousselet de Reims. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541257 origin: United States. developer country: France. cultivar: Royale Vendee. pedigree: Seedling selection. Perennial. Cultivar. Plant.
- PI 541258 origin: United States. origin institute: Oregon State University, Experiment Station, Hood River, Oregon. cultivar: Anjou Russet. pedigree: Anjou sport. Perennial. Cultivar. Plant.
- PI 541259 origin: United States. developer country: Europe. cultivar: Saint Andre. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541260 origin: United States. developer country: Belgium. cultivar: Saint Ghislain. Perennial. Cultivar. Plant.
- PI 541261 origin: United States. developer country: Germany. cultivar: Schweizer Wasserbirne. Perennial. Cultivar. Plant.
- PI 541262 origin: United States. developer country: United States. cultivar: Seckel. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541263 origin: United States. developer country: France. cultivar: Senateur Belle. Perennial. Cultivar. Plant.
- PI 541264 origin: United States. developer country: United States. cultivar: Snyder. Perennial. Cultivar. Plant.
- PI 541265 origin: United States. developer country: United States. cultivar: Stark Jumbo. pedigree: Bartlett bud mutation. Perennial. Cultivar. Plant.
- PI 541266 origin: United States. developer country: United States. cultivar: Stout. Perennial. Cultivar. Plant.
- PI 541267 origin: United States. cultivar: Bartlett Striped. pedigree: Bartlett sport. Perennial. Cultivar. Plant.
- 'PI 541268 origin: United States. developer country: France.
 cultivar: Success de la Milleraye. Perennial. Cultivar.
 Plant.

PI 541114 to 541298-continued

- PI 541269 origin: United States. developer country: France. cultivar: Sucree Verte. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541270 origin: United States. developer country: Belgium. cultivar: Suzette de Bavay. Perennial. Cultivar. Plant.
- PI 541271 origin: United States. developer country: United Kingdom. cultivar: Taynton Squash. local name: Perry Pear. Perennial. Cultivar. Plant.
- PI 541272 origin: United States. cultivar: Tedrow Beauty. Perennial. Cultivar. Plant.
- PI 541273 origin: United States. developer country: United Kingdom. cultivar: Thorn. pedigree: Unknown. local name: Perry Pear. Perennial. Cultivar. Plant.
- PI 541274 origin: United States. cultivar: Thornley. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541275 origin: United States. developer country: France. cultivar: Triomphe de Vienne. pedigree: Seedling selection. Perennial. Cultivar. Plant.
- PI 541276 origin: United States. origin institute: USDA/ARS, Beltsville, Maryland. cultivar: USDA No. 463. Perennial. Breeding Material. Plant.
- PI 541277 origin: United States. developer country: United States. cultivar: Vermont Beauty. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541278 origin: United States. developer country: France. cultivar: Verte Longue d'Automne. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541279 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. cultivar: W-1. pedigree: Seedling selection. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541280 origin: United States. developer country: United States. cultivar: Warner. Perennial. Cultivar. Plant.
- PI 541281 origin: United States. developer country: France. cultivar: White Doyenne. pedigree: Unknown. Perennial. Cultivar. Plant.

PI 541114 to 541298-continued

- PI 541282 origin: United States. cultivar: White Star. Perennial. Cultivar. Plant.
- PI 541283 origin: United States. developer country: United States. cultivar: Wilder Early. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541284 origin: United States. cultivar: Winter Bartlett. pedigree: Seedling of cultivar Bartlett. Perennial. Cultivar. Plant.
- PI 541285 origin: United States. developer country: Belgium. cultivar: Winter Nelis. pedigree: Seedling selection. Perennial. Cultivar. Plant.
- PI 541286 origin: United States. developer country: United States. cultivar: Worden Seckle. pedigree: Seedling of cultivar Seckel. Perennial. Cultivar. Plant.
- PI 541287 origin: United States. developer country: United Kingdom. cultivar: Yellow Huffcap. local name: Perry Pear. Perennial. Cultivar. Plant.
- PI 541288 origin: United States. developer country: Switzerland. cultivar: Zuckerbirne. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541289 Pyrus communis subsp. caucasica (Fed.) Browicz ROSACEAE Pear origin: USSR. developer country: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. cultivar: Mag 4. pedigree: Seedling selection from seed collected in Russia. Perennial. Breeding Material. Plant.
- PI 541290 Pyrus communis subsp. caucasica (Fed.) Browicz ROSACEAE
 Pear
 origin: USSR. developer country: United States. origin
 institute: Oregon State University, Experiment Station,
 Medford, Oregon. cultivar: Mag 1. pedigree: Seedling
 selection from seedlot collected in Russia. Perennial.
 Breeding Material. Plant.
- PI 541291 origin: Turkey. developer country: United States.
 origin institute: Oregon State University, Experiment
 Station, Medford, Oregon. pedigree: Seedling selection
 from seed collected in Turkey. Perennial. Breeding
 Material. Plant.

PI 541114 to 541298-continued

- PI 541292 origin: Turkey. developer country: United States.
 origin institute: Oregon State University, Experiment
 Station, Medford, Oregon. pedigree: Seedling selection
 from seed collected in Turkey. Perennial. Breeding
 Material. Plant.
- PI 541293 origin: Turkey. developer country: United States.
 origin institute: Oregon State University, Experiment
 Station, Medford, Oregon. pedigree: Seedling selection
 from seed collected in Turkey. Perennial. Breeding
 Material. Plant.
- PI 541294 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. cultivar: P-12. pedigree: Seedling selection. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541295 origin: United States. origin institute: Oregon State
 University, Experiment Station, Medford, Oregon.
 cultivar: P-18. pedigree: Open-pollinated French P.
 communis seedling selection. local name: Rootstock Pear.
 Perennial. Breeding Material. Plant.
- PI 541296 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. cultivar: P-70. pedigree: Seedling selection. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541297 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. cultivar: P-79. pedigree: Seedling selection. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541298 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. cultivar: P-87. pedigree: Seedling selection. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541299 to 541300. Pyrus communis L. ROSACEAE Pear

Donated by: Waterworth, Dr. Howard, USDA-ARS, National Program Staff, Room 228 Bldg 005, BARC-West, Beltsville, Maryland, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 24, 1981.

- PI 541299 to 541300-continued
 - PI 541299 origin: United States. origin institute: USDA/ARS, Beltsville, Maryland. cultivar: Magness. pedigree: Seckel seedling x Comice. Perennial. Cultivar. Plant.
 - PI 541300 origin: Italy. cultivar: Spadona di Salerno. pedigree: Unknown. Perennial. Cultivar. Cutting.
- PI 541301. Pyrus communis L. ROSACEAE Pear

Donated by: Pourtet, J., Angers, France. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 31, 1981.

origin: France. pedigree: Collected from the wild in France. collected: December 31, 1963. locality: Angers Experiment Station. Perennial. Wild. Seed.

PI 541302. Pyrus communis L. ROSACEAE Pear

Donated by: Pacific Coast Nursery, 18616 NW Reeder Road, Portland, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 31, 1981.

origin: Europe. pedigree: Collected from the wild in Europe. collected: May 10, 1963. Perennial. Wild. Seed.

PI 541303 to 541319. Pyrus communis L. ROSACEAE Pear

Donated by: Fridlund, Dr. Paul, Washington State University, Irrigated Agriculture and Extension, Center, Prosser, Washington, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 31, 1981.

- PI 541303 origin: United States. developer country: France. cultivar: Duchesse d'Angouleme. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541304 origin: United States. developer country: France. cultivar: Belle Poitevien. Perennial. Cultivar. Plant.
- PI 541305 origin: United States. developer country: United Kingdom. cultivar: Brandy. local name: Perry Pear. Perennial. Cultivar. Plant.
- PI 541306 origin: United States. developer country: United States. origin institute: University of Tennessee, Agricultural Experiment Station, Knoxville, Tennessee. cultivar: Dabney. pedigree: Seckel x Garber. Perennial. Cultivar. Plant.

PI 541303 to 541319-continued

- PI 541307 origin: United States. developer country: Belgium. cultivar: Doyenne d'Hiver. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541308 origin: United States. origin institute: Eller Pear Co., Yakima, Washington. cultivar: Bartlett Eller. Perennial. Cultivar. Plant.
- PI 541309 origin: United States. developer country: United Kingdom. cultivar: Fertility. pedigree: Seedling of cultivar Beurre Goubault. Perennial. Cultivar. Plant.
- PI 541310 origin: United States. developer country: Belgium. cultivar: Glou Morceau. pedigree: Seedling selection. Perennial. Cultivar. Plant.
- PI 541311 origin: United States. developer country: United States. cultivar: Hood. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541312 origin: United States. developer country: United States. cultivar: Kalle. pedigree: Clapp Favorite mutant. Perennial. Cultivar. Plant.
- PI 541313 origin: United States. developer country: United States. origin institute: D. Lawyer and Sons Nursery, Plains, Montana. cultivar: Lacock No. 6. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541314 origin: United States. developer country: United States. origin institute: University of Tennessee, Agricultural Experiment Station, Knoxville, Tennessee. cultivar:

 Mooers. pedigree: Duchesse D'Angouleme x Late Faulkner.
 Perennial. Cultivar. Plant.
- PI 541315 origin: United States. developer country: United States. origin institute: USDA/ARS, Beltsville, Maryland. cultivar: Moonglow. pedigree: US-Mich. 437 x Roi Charles Wurtemburg. Perennial. Cultivar. Plant.
- PI 541316 origin: United States. developer country: Australia. cultivar: Packham Late. Perennial. Cultivar. Plant.
- PI 541317 origin: United States. developer country: United Kingdom. cultivar: Red Pear. pedigree: Unknown. local name: Perry Pear. Perennial. Cultivar. Plant.
- PI 541318 origin: United Kingdom. origin institute: University of Bristol, Long Ashton Research Station, Bristol, England. cultivar: LA-62. Perennial. Breeding Material. Plant.

- PI 541303 to 541319-continued
 - PI 541319 origin: Europe. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Oregon. pedigree: Seedling selection from
 European seedlot. Perennial. Breeding Material. Plant.
- PI 541320. Pyrus communis L. ROSACEAE Pear

Donated by: Janick, Dr. Jules, Purdue University, Department of Horticulture, West Lafayette, Indiana, United States. **remarks:** Pyrus accessions at NCGR-Corvallis being numbered. Received August 31, 1981.

origin: United States. developer country: United States. origin institute: Purdue University, Dept. Horticulture, west Lafayette, Indiana 47907. cultivar: Honeysweet. pedigree: Seckel x US 220 (Vermont Beauty x Roi Charles De Wurtenburg). Perennial. Cultivar. Plant.

PI 541321. Pyrus communis L. ROSACEAE Pear

Donated by: Dewey, Douglas, USDA-ARS-WR, Utah State University, UMC 63, Crops Research Lab, Logan, Utah, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received September 03, 1981.

origin: United States. developer country: Europe. pedigree: Uncertain. Perennial. Uncertain. Plant.

PI 541322 to 541323. Pyrus communis L. ROSACEAE Pear

Donated by: Callan, Dr. Nancy, Western Agricultural Research Center, 531 NE Quast Lane, Corvallis, Montana, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 24, 1982.

- PI 541322 origin: United States. developer country: United States. origin institute: South Dakota State University, Experiment Station, Brookings, South Dakota. cultivar: Luscious. pedigree: SD-E31 x Ewart. Perennial. Cultivar. Plant.
- PI 541323 origin: Turkey. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling
 selection from seed collected in Turkey. Perennial.
 Breeding Material. Plant.

PI 541324 to 541325. Pyrus communis L. ROSACEAE Pear

Donated by: Anderson, Dr. Peter, Missouri State University, State Fruit Experiment Station, Mountain Grove, Missouri, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received May 01, 1982.

- PI 541324 origin: United States. origin institute: Oregon State University, Department of Horticulture, Corvallis, Oregon. Perennial. Breeding Material. Plant.
- PI 541325 origin: United States. origin institute: Oregon State University, Department of Horticulture, Corvallis, Oregon. Perennial. Breeding Material. Plant.

PI 541326 to 541358. Pyrus communis L. ROSACEAE Pear

Donated by: Bell, Richard, USDA-ARS-NER, Appalachian Fruit Res. Station, Route 2, Box 45, Kearneysville, West Virginia, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received February 01, 1983.

- PI 541326 origin: United States. developer country: Italy. cultivar: Angelica Di Saonara. Perennial. Cultivar. Plant.
- PI 541327 origin: United States. developer country: United States. cultivar: Barseck. pedigree: Bartlett x Seckel. Perennial. Cultivar. Plant.
- PI 541328 origin: United States. developer country: United States. origin institute: Hillcrest Orchard, Medford, Oregon. cultivar: Bartlett 4n. pedigree: Bartlett sport. Perennial. Cultivar. Plant.
- PI 541329 origin: United States. cultivar: Beurre Auguste. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541330 origin: United States. developer country: Europe. cultivar: Blanquet Precoce. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541331 origin: United States. developer country: Europe. cultivar: Carigradsko Alice. pedigree: Uncertain. Perennial. Cultivar. Plant.
- PI 541332 origin: United States. developer country: France. cultivar: Claude Blanchet. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541333 origin: United States. Perennial. Breeding Material. Plant.

PI 541326 to 541358-continued

- PI 541334 origin: United States. cultivar: Doyenne du Comice 4n. Perennial. Cultivar. Plant.
- PI 541335 origin: United States. developer country: France.
 origin institute: Charteaux Monastary, Paris, West
 Virginia. cultivar: Doyenne Gris. pedigree: White
 Doyenne russet sport. Perennial. Cultivar. Plant.
- PI 541336 origin: United States. developer country: France. cultivar: Duchesse d'Angouleme Bronzee. pedigree: Duchesse d'Angouleme sport. Perennial. Cultivar. Plant.
- PI 541337 origin: United States. developer country: Europe. cultivar: Early Green Sugar. pedigree: Uncertain. Perennial. Cultivar. Plant.
- PI 541338 origin: United States. origin institute: University of Florida, Florida. cultivar: Florida 11-25. Perennial. Breeding Material. Plant.
- PI 541339 origin: Canada. origin institute: Agriculture Canada, Research Station, Harrow, Ontario. cultivar: Harrow 600. pedigree: Seedling selection. Perennial. Breeding Material. Plant.
- PI 541340 origin: United States. cultivar: Bartlett Improved. Perennial. Cultivar. Plant.
- PI 541341 origin: United States. cultivar: Jubileer D'Ar. Perennial. Cultivar. Plant.
- PI 541342 origin: United States. developer country: United States. cultivar: Kyles Sugar. Perennial. Cultivar. Plant.
- PI 541343 origin: United States. developer country: United States. origin institute: Rutgers University, Agricultural Experiment Station, New Brunswick, New Jersey. cultivar: Mac. pedigree: Gorham x NJ 1. Perennial. Cultivar. Plant.
- PI 541344 origin: United States. cultivar: Bartlett 4n Max Red. pedigree: Bartlett bud mutation. Perennial. Cultivar. Plant.
- PI 541345 origin: United States. developer country: United States. origin institute: University of Tennessee, Agricultural Experiment Station, Clarksville, Tennessee. cultivar: Merricourt. pedigree: Seckel x Late Faulkner. Perennial. Cultivar. Plant.

- PI 541346 origin: United States. cultivar: Mississippi US 3-10-5. pedigree: PI 49492 x Buerre Bosc. Perennial. Breeding Material. Plant.
- PI 541347 origin: United States. developer country: United States. origin institute: USDA/ARS, Beltsville, Maryland. cultivar: Moe. pedigree: Zuckerbirne x Clapp Favorite. Perennial. Cultivar. Plant.
- PI 541348 origin: United States. developer country: Canada.
 origin institute: Agriculture Canada, Experiment Station,
 Summerland, British Columbia. cultivar: Sierra.
 pedigree: Bartlett x Marguerite Marillat. Perennial.
 Cultivar. Plant.
- PI 541349 origin: United States. developer country: United States. cultivar: Sirrine. pedigree: Seedling of cultivar Bartlett. Perennial. Cultivar. Plant.
- PI 541350 origin: United States. developer country: United States. cultivar: Southworth. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541351 origin: United States. developer country: United States. cultivar: Spartlet. pedigree: Chance Bartlett seedling. Perennial. Cultivar. Plant.
- PI 541352 origin: United States. developer country: United States. origin institute: Stark Bros. Nursery, South Haven, Michigan. cultivar: Starkrimson. pedigree: Clapp Favorite bud mutation. Perennial. Cultivar. Plant.
- PI 541353 origin: United States. developer country: United States. cultivar: Sugar Top. Perennial. Cultivar. Plant.
- PI 541354 origin: United States. developer country: United States. cultivar: Surecrop. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541355 origin: United States. cultivar: Wikler Early. Perennial. Cultivar. Plant.
- PI 541356 origin: United States. developer country: United States. origin institute: Cornell University, Agricultural Experiment Station, Geneva, New York. cultivar: Willard. pedigree: Bartlett x Dorset. local name: Rootstock Pear. Perennial. Cultivar. Plant.
- PI 541357 origin: United States. cultivar: Winkleman. Perennial. Cultivar. Plant.

- PI 541326 to 541358-continued
 - PI 541358 origin: United States. cultivar: Winter Nelis 4n.
 pedigree: Uncertain, possibly derived from cultivar
 Winter Nelis. Perennial. Breeding Material. Plant.
- PI 541359 to 541363. Pyrus communis L. ROSACEAE Pear

Donated by: Lombard, Dr. Porter, Oregon State University, Department of Horticulture, Cordley Hall 2042, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received February 08, 1983.

- PI 541359 origin: United States. developer country: United States. cultivar: Berger. pedigree: Bud mutation. Perennial. Cultivar. Plant.
- PI 541360 origin: United States. developer country: France. cultivar: Bonne d'Ezee. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541361 origin: United States. developer country: France. cultivar: Colonel Marchand. Perennial. Cultivar. Plant.
- PI 541362 origin: United States. developer country: France. cultivar: Doyenne de Saumur. pedigree: Unknown. Perennial. Cultivar. Plant.
- PI 541363 origin: United States. developer country: United States. cultivar: Buerre Hardy Red. pedigree: Hardy sport. Perennial. Cultivar. Plant.
- PI 541364. Pyrus communis L. ROSACEAE Pear

Donated by: Beutel, James A., University of California, Department of Pomology, Davis, California, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received February 10, 1983.

origin: United States. cultivar: Manyuan. Perennial. Cultivar. Plant.

PI 541365 to 541437. Pyrus communis L. ROSACEAE Pear

Donated by: Westwood, Dr. M.N., Oregon State University, NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

- PI 541365 origin: France. developer country: United States.
 origin institute: Naumes Orchard, Medford, Oregon.
 cultivar: Anjou Naumes. pedigree: Anjou selection from
 Naumes Orchard. Perennial. Cultivar. Plant.
- PI 541366 origin: Turkey. pedigree: Collected from the wild in Turkey. collected: November 26, 1963. latitude: 39 deg. N. longitude: 36 deg. E. Perennial. Wild. Seed.
- PI 541367 origin: United States. origin institute: Oregon State University, Lewis-Brown Farm, Corvallis, Oregon. pedigree: 4n Bartlett x self. Perennial. Breeding Material. Plant.
- PI 541368 origin: United States. origin institute: Oregon State
 University, Experiment Station, Medford, Oregon.
 cultivar: OPR 13?. pedigree: Old Home x Farmingdale.
 local name: Rootstock Pear. Perennial. Breeding
 Material. Plant.
- PI 541369 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 51.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541370 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 97.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541371 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 217.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541372 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 226.

 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541373 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 288.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541374 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 361.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.

- PI 541375 origin: United States. pedigree: OP seed from escaped Bartlett pear. latitude: 53 deg. N. longitude: 02 deg. W. Perennial. Wild. Seed.
- PI 541376 origin: United States. pedigree: OP seed from escaped Bartlett. latitude: 53 deg. N. longitude: 02 deg. W. Perennial. Wild. Seed.
- PI 541377 origin: United States. pedigree: Collected from the wild in Oregon. locality: Corvallis. Perennial. Wild. Seed.
- PI 541378 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. cultivar: OH-20. pedigree: Open pollinated OH-20. Perennial. Breeding Material. Seed.
- PI 541379 origin: United States. pedigree: Open pollinated from yard planting. collected: October 14, 1963. Perennial. Cultivated. Seed.
- PI 541380 origin: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Old Home x Bartlett. collected: November 28, 1964. Perennial. Breeding Material. Seed.
- PI 541381 origin: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seckel x Domestic French open pollinated. Perennial. Breeding Material. Seed.
- PI 541382 origin: Turkey. pedigree: Collected from the wild in Turkey. collected: November 26, 1963. locality: Derberk, Izmit. Perennial. Wild. Seed.
- PI 541383 origin: France. pedigree: Collected from the wild in France. Perennial. Wild. Seed.
- PI 541384 origin: Turkey. pedigree: Collected from the wild in Turkey. collected: November 26, 1963. locality:

 Derbent, Izmit. latitude: 40 deg. 45 min. N. longitude: 29 deg. 50 min. E. Perennial. Wild. Seed.
- PI 541385 origin: Turkey. pedigree: Collected from the wild in Turkey. collected: November 26, 1963. locality:
 Derbent, Izmit. latitude: 40 deg. 45 min. N. longitude: 29 deg. 50 min. E. Perennial. Wild. Seed.
- PI 541386 origin: United States. origin institute: Oregon State
 University, Lewis-Brown Farm, Corvallis, Oregon.
 pedigree: OP Red Reimer (Comice x Max Red Bartlett) seed.
 Perennial. Breeding Material. Seed.

- PI 541387 origin: United States. origin institute: Oregon State
 University, Dept. Horticulture, Corvallis, Oregon.
 pedigree: Open pollinated seedling selection of cultivar
 Bosc. Perennial. Breeding Material. Plant.
- PI 541388 origin: United States. developer country: United States. cultivar: El Dorado. pedigree: Seedling of cultivar Bartlett. Perennial. Cultivar. Plant.
- PI 541389 origin: UNCERTAIN. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection. Perennial. Breeding Material. Plant.
- PI 541390 origin: United States. pedigree: Unknown. Perennial. Cultivated. Plant.
- PI 541391 origin: Turkey. developer country: United States.
 origin institute: Oregon State Unversity, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling
 selection A from seedlot collected in Turkey. Perennial.
 Breeding Material. Plant.
- PI 541392 origin: Turkey. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling
 selection B from seed collected in Turkey. Perennial.
 Breeding Material. Plant.
- PI 541393 origin: Turkey. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling
 selection from seed collected in Turkey. Perennial.
 Breeding Material. Plant.
- PI 541394 origin: France. developer country: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection from seed collected in France. Perennial. Breeding Material. Plant.
- PI 541395 origin: Turkey. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling
 selection A from seed collected in Turkey. Perennial.
 Breeding Material. Plant.
- PI 541396 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 257.
 pedigree: Old Home x Farmingdale seedling selection.
 local name: Rootstock Pear. Perennial. Breeding
 Material. Plant.

- PI 541397 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 18.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541398 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 29.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541399 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 7.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541400 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 267.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541401 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 261.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541402 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 40.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. other id: Plant Patent 5412. group: PLNT.
 restricted: PAT. Perennial. Breeding Material. Plant.
- PI 541403 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 340.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541404 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 132.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541405 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 333.

 pedigree: Old Home x Farmingdale selection. local name:
 Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541406 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 130.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.

- PI 541407 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 501.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541408 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 1.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541409 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 4.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541410 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 5.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541411 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 23.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541412 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 34.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541413 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 2.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541414 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 512.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541415 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 87.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. other id: Patent Pending. group: PEND.
 restricted: PAT. Perennial. Breeding Material. Plant.
- PI 541416 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 101.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.

PI 541365 to 541437-continued

- PI 541417 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 109.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541418 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 112.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541419 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 198.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541420 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 230.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541421 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 9.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541422 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 247.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541423 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 259.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541424 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 266.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541425 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 280.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541426 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 282.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.

PI 541365 to 541437-continued

- PI 541427 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 319.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541428 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 377.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Plant.
- PI 541429 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. cultivar: P-61. pedigree: Seedling selection. local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541430 origin: United States. origin institute: Oregon State
 University, Experiment Station, Medford, Oregon.
 cultivar: OPR 1. pedigree: Seedling of cultivar Anjou.
 local name: Rootstock Pear. Perennial. Breeding
 Material. Plant.
- PI 541431 origin: United States. developer country: Canada.
 origin institute: Agriculture Canada, Research Station,
 Harrow, Ontario. cultivar: Harrow Delight. pedigree:
 Bartlett x (Early Sweet x Old Home). collected: January
 01, 1973. Perennial. Cultivar. Plant.
- PI 541432 origin: United States. developer country: France.
 origin institute: Comice Horticole, Dept. Maine et Loire,
 Angers, Oregon. cultivar: Doyenne du Comice. pedigree:
 Seedling selection. Perennial. Cultivar. Plant.
- PI 541433 origin: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection. Perennial. Breeding Material. Plant.
- PI 541434 origin: United States. origin institute: Oregon State
 University, Exp. Station, Medford, Oregon. pedigree: Old
 Home x Farmingdale (?). local name: Rootstock Pear.
 Perennial. Breeding Material. Plant.
- PI 541435 origin: Turkey. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling
 selection B from seed collected in Turkey. Perennial.
 Breeding Material. Plant.

- PI 541365 to 541437-continued
 - PI 541436 origin: Turkey. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling
 selection B from seed collected in Turkey. Perennial.
 Breeding Material. Plant.
 - PI 541437 origin: Europe. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling
 selection from European seedlot. Perennial. Breeding
 Material. Plant.
- PI 541438. Pyrus communis L. ROSACEAE Pear

Donated by: Royal Botanical Gardens, Kew, England, United Kingdom. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

origin: United Kingdom. pedigree: Open pollinated from botanical collection. Perennial. Cultivated. Seed.

PI 541439. Pyrus communis L. ROSACEAE Pear

Donated by: Cameron, Dr. H. R., USDA-ARS, Dept. Botany and Plant Pathology, Oregon State University, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

origin: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. cultivar: B-13. pedigree: Probably Bartlett x Anjou. local name: Rootstock Pear. Perennial. Breeding Material. Plant.

PI 541440 to 541441. Pyrus communis L. ROSACEAE Pear

Donated by: Fridlund, Dr. Paul, Washington State University, Irrigated Agriculture and Extension, Center, Prosser, Washington, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received January 17, 1984.

- PI 541440 origin: United States. developer country: Europe. pedigree: Uncertain. Perennial. Uncertain. Plant.
- PI 541441 origin: United States. developer country: Europe. pedigree: Uncertain. Perennial. Uncertain. Plant.

PI 541442. Pyrus communis L. ROSACEAE Pear

Donated by: Quigley, Brian, PO Box 10818, Bainbridge Island, Washington, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 09, 1984.

origin: United States. developer country: United States.
cultivar: Atlantic Queen. Perennial. Cultivar.
Cutting.

PI 541443 to 541444. Pyrus communis L. ROSACEAE Pear

Donated by: Linquist, E. J., 3039 Moran Avenue, Richmond, California, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 13, 1984.

- PI 541443 origin: United States. developer country: Europe. cultivar: Amir'e Joannet. pedigree: Unknown. Perennial. Cultivar. Cutting.
- PI 541444 origin: United States. developer country: Germany. cultivar: Stuttgarter-Geishirtle. Perennial. Cultivar. Plant.
- PI 541445 to 541447. Pyrus communis L. ROSACEAE Pear

Donated by: Bell, Richard, USDA-ARS-NER, Appalachian Fruit Res. Station, Route 2, Box 45, Kearneysville, West Virginia, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 14, 1984.

- PI 541445 origin: United States. cultivar: Ewart 4n. Perennial. Cultivar. Plant.
- PI 541446 origin: United States. developer country: United States. origin institute: Cornell University, Agricultural Experiment Station, Geneva, New York. cultivar: Marks. pedigree: Seedling selection. Perennial. Cultivar. Plant.
- PI 541447 origin: United States. cultivar: Bartlett Lowry Red 4n. Perennial. Cultivar. Plant.
- PI 541448. Pyrus communis L. ROSACEAE Pear

Donated by: Warren, T.O., 1423 W. 7th Street, Hattiesburg, Mississippi, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 04, 1985.

origin: United States. cultivar: Warren. Perennial. Cultivar. Plant.

PI 541449 to 541454. Pyrus communis L. ROSACEAE Pear

Donated by: Westwood, Dr. M.N., Oregon State University, NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received January 22, 1986.

- PI 541449 origin: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection A. local name: Rootstock Pear. Perennial. Breeding Material. Cutting.
- PI 541450 origin: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection B. local name: Rootstock Pear. Perennial. Breeding Material. Cutting.
- PI 541451 origin: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. pedigree: Seedling selection C. local name: Rootstock Pear. Perennial. Breeding Material. Cutting.
- PI 541452 origin: Europe. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling
 selection from European seedlot. Perennial. Breeding
 Material. Cutting.
- PI 541453 origin: France. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling
 selection from seedlot collected in France. Perennial.
 Breeding Material. Cutting.
- PI 541454 origin: United States. origin institute: Daybreak
 Nursery, Forest Grove, Oregon. cultivar: OHxF 58.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Cutting.

PI 541455. Pyrus communis L. ROSACEAE Pear

Donated by: Bell, Richard, USDA-ARS-NER, Appalachian Fruit Res. Station, Route 2, Box 45, Kearneysville, West Virginia, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received February 24, 1986.

origin: United States. developer country: United States. cultivar: Beierschmidt. pedigree: Seedling selection of cv Bartlett. Perennial. Cultivar. Plant.

- PI 541456 to 541457. Pyrus communis L. ROSACEAE Pear
 - Donated by: Westigard, Dr. P. H., Oregon State University, Southern Oregon Experiment Station, 569 Hanley Road, Medford, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received February 28, 1986.
 - PI 541456 origin: United States. developer country: United States. cultivar: Old Home. pedigree: Chance seedling. local name: Rootstock Pear. Perennial. Cultivar. Plant.
 - PI 541457 origin: United States. developer country: France. cultivar: Vicar of Winkfield. pedigree: Chance seedling. Perennial. Cultivar. Plant.
- PI 541458 to 541459. Pyrus communis L. ROSACEAE Pear

Donated by: Monette, Dr. Paul, Agriculture Canada, 8801 East Saanich Road, Sidney, British Columbia, Canada. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received August 18, 1986.

- PI 541458 origin: Canada. origin institute: Agriculture Canada, Experiment Station, Summerland, British Columbia. cultivar: Sierra. pedigree: Bartlett x Marguerite Marillat. Perennial. Cultivar. Plant.
- PI 541459 origin: Canada. developer country: Italy. cultivar:
 Coscia Precoce. pedigree: Precoce di Cassano x Coscia.
 Perennial. Cultivar. Plant.
- PI 541460 to 541464. Pyrus communis L. ROSACEAE Pear

Donated by: Lombard, Dr. Porter, Oregon State University, Department of Horticulture, Cordley Hall 2042, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received September 15, 1986.

- PI 541460 origin: France. origin institute: INRA, Angers.
 pedigree: Seedling selection. local name: Rootstock
 Pear. Perennial. Breeding Material. Cutting.
- PI 541461 origin: France. origin institute: INRA, Angers.
 pedigree: Seedling selection. local name: Rootstock
 Pear. Perennial. Breeding Material. Cutting.
- PI 541462 origin: France. origin institute: INRA, Angers. pedigree: Seedling selection. local name: Rootstock Pear. Perennial. Breeding Material. Cutting.
- PI 541463 origin: France. origin institute: INRA, Angers.
 pedigree: Seedling selection. local name: Rootstock
 Pear. Perennial. Breeding Material. Cutting.

- PI 541460 to 541464-continued
 - PI 541464 origin: France. origin institute: INRA, Angers.
 pedigree: Seedling selection. local name: Rootstock
 Pear. Perennial. Breeding Material. Cutting.
- PI 541465. Pyrus communis L. ROSACEAE Pear

Donated by: Rombough, Lon, 4285 Claxter Ct. N.E., Salem, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 09, 1987.

origin: United States. developer country: Italy.
cultivar: Perazola. Perennial. Cultivar. Cutting.

PI 541466. Pyrus communis L. ROSACEAE Pear

Donated by: Fisher, Dr. Elwood, James Madison University, Biology Department, Harrisonburg, Virginia, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 14, 1987.

origin: United States. developer country: United
Kingdom. cultivar: Gansel Seckel Pear. pedigree: Seckel
x Gansel Bergamot. Perennial. Cultivar. Cutting.

PI 541467. Pyrus communis L. ROSACEAE Pear

Donated by: Vitkovskij, Prof. V.L, N.I. Vavilov Institute, 44 Herzen Str., Leningrad, Soviet Union. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received March 16, 1987.

origin: USSR. pedigree: Collected from the wild in the Soviet Union. Perennial. Wild. Seed.

PI 541468 to 541469. Pyrus communis L. ROSACEAE Pear

Donated by: Hortus Botanicus Acad. Sci., Taschkent, Uzbek Republic, Soviet Union. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received April 15, 1987.

- PI 541468 origin: USSR. pedigree: Open-pollinated from botanical collection. Perennial. Cultivated. Seed.
- PI 541469 origin: USSR. pedigree: Open-pollinated from botanical collection. Perennial. Cultivated. Seed.

- PI 541470 to 541471. Pyrus communis L. ROSACEAE Pear
 - Donated by: Hortus Botanicus Acad. Sci., Taschkent, Uzbek Republic, Soviet Union. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received April 24, 1987.
 - PI 541470 origin: USSR. pedigree: Open-pollinated from botanical collection. Perennial. Cultivated. Seed.
 - PI 541471 origin: USSR. pedigree: Open-pollinated from botanical collection. Perennial. Cultivated. Seed.
- PI 541472. Pyrus communis L. ROSACEAE Pear

Donated by: Sugar, Dr. David, Oregon State University, Southern Oregon Experiment Station, 569 Hanley Road, Medford, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received September 29, 1987.

origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. cultivar: Cascade. pedigree: Max Red Bartlett x Comice. other id: Plant Patent?. group: PLNT. restricted: PAT. Perennial. Cultivar. Tissue Culture.

- PI 541473 to 541481. Pyrus communis L. ROSACEAE Pear
 - Donated by: Damroth, Michael S., Route No. 3, Chetek, Wisconsin, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received January 15, 1988.
 - PI 541473 origin: United States. cultivar: Boizand. Perennial. Cultivar. Cutting.
 - PI 541474 origin: United States. developer country: Switzerland. cultivar: Bariker. collected: 1940. Perennial. Cultivar. Plant.
 - PI 541475 origin: United States. cultivar: Francis pear. Perennial. Cultivar. Cutting.
 - PI 541476 origin: United States. developer country: United States. origin institute: University of Minnesota, Fruit Breeding Farm, Excelsior, Minnesota. cultivar: Golden Spice. pedigree: Unknown. Perennial. Cultivar. Cutting.
 - PI 541477 origin: United States. developer country: United States. origin institute: St. Lawrence Nurseries, RR 2, Potsdam, New York. cultivar: Hudar. Perennial. Cultivar. Cutting.

PI 541473 to 541481-continued

- PI 541478 origin: United States. cultivar: John. Perennial. Cultivar. Cutting.
- PI 541479 origin: United States. cultivar: Laxinoua. Perennial. Cultivar. Cutting.
- PI 541480 origin: United States. developer country: United States. origin institute: St. Lawrence Nurseries, RR 2, Potsdam, New York. cultivar: Manning Miller. Perennial. Cultivar. Cutting.
- PI 541481 origin: United States. cultivar: Pioneer #3. Perennial. Cultivar. Cutting.

PI 541482. Pyrus communis L. ROSACEAE Pear

Donated by: Smith, Dr. Brian, University of Wisconsin, Dept. of Plant and Earth Sci., River Falls, Wisconsin, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received February 12, 1988.

origin: United States. developer country: United States. origin institute: University of Minnesota, Fruit Breeding Farm, Excelsior, Minnesota. cultivar: Golden Spice. pedigree: Unknown. Perennial. Cultivar. Cutting.

PI 541483 to 541489. Pyrus communis L. ROSACEAE Pear

Donated by: Kennedy, C.T., California Rare Fruit Growers, 95 Atherton Avenue, Atherton, California, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received February 16, 1988.

- PI 541483 origin: United States. cultivar: Catillac. Perennial. Cultivar. Cutting.
- PI 541484 origin: United States. developer country: United Kingdom. cultivar: Black Worcester. pedigree: Unknown. Perennial. Cultivar. Cutting.
- PI 541485 origin: United States. developer country: United Kingdom. cultivar: Hessle. pedigree: Chance seedling. Perennial. Cultivar. Cutting.
- PI 541486 origin: United States. developer country: United Kingdom. cultivar: Winnals Longdon. Perennial. Cultivar. Cutting.
- PI 541487 origin: United States. cultivar: Beurre Rance. Perennial. Cultivar. Cutting.

- PI 541483 to 541489-continued
 - PI 541488 origin: United States. cultivar: Olivier de Serres. Perennial. Cultivar. Cutting.
 - PI 541489 **origin:** United States. **cultivar:** Alexandrina Bivort. Perennial. Cultivar. Cutting.
- PI 541490 to 541499. Pyrus communis L. ROSACEAE Pear

Donated by: Westwood, Dr. M.N., Oregon State University, NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received February 19, 1988.

- PI 541490 origin: Turkey. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling selection from seed collected in Turkey. Perennial.
 Breeding Material. Cutting.
- PI 541491 origin: Turkey. developer country: United States.
 origin institute: Oregon State University, Dept.
 Horticulture, Corvallis, Oregon. pedigree: Seedling selection from seed collected in Turkey. Perennial.
 Breeding Material. Cutting.
- PI 541492 origin: United States. developer country: United States. cultivar: Hood. pedigree: Chance seedling. Perennial. Cultivar. Cutting.
- PI 541493 origin: United States. origin institute: Oregon State
 University, Experiment Station, Medford, Oregon.

 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Cutting.
- PI 541494 origin: United States. origin institute: Oregon State
 University, Experiment Station, Medford, Oregon.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Cutting.
- PI 541495 origin: United States. origin institute: Oregon State
 University, Experiment Station, Medford, Oregon.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Cutting.
- PI 541496 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. pedigree: Probably a seedling selection. Perennial. Breeding Material. Cutting.

PI 541490 to 541499-continued

- PI 541497 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. pedigree: Probably a seedling selection. Perennial. Breeding Material. Cutting.
- PI 541498 origin: United States. origin institute: Oregon State
 University, Experiment Station, Medford, Oregon.
 pedigree: Old Home x Farmingdale. local name: Rootstock
 Pear. Perennial. Breeding Material. Cutting.
- PI 541499 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. pedigree: Seedling selection. Perennial. Breeding Material. Cutting.

Scientific Name Cross Reference

Abelmoschus esculentus 537062-	Andropogon gerardii 537393,
537063,537454,538051-538161	537589
Abelmoschus manihot 538162-	Arachis hypogaea 536988,537112,
538185	537264,538758-538759,540460-
Abelmoschus moschatus 538186-	540461,540467-540508,540825-
538227	540836
Abelmoschus sp. 538035-538050	Arachis hypogaea
Aegle marmelos 539142	subsp. fastigiata 540837-
Aeglopsis chevalieri 539143	540857
Agrostis gigantea 538782-	Arachis hypogaea
538784	subsp. hypogaea 540858-
Agrostis tenuis 538785	540867
Allium cepa 537590-537593	Arachis hypogaea var. vulgaris
Allium longicuspis 540314-	537448-537449
540317,540357	Arachis sp. 540868-540871
Allium sativum	Artemisia tilesii 540424
var. ophioscorodon 540319-	Astracantha cerasocrena 540384-
540320,540359-540366	540385
Allium sativum var. sativum	Astracantha echidniformis
540318,540321-540356,540358,	540386-540389
540367-540380	Astracantha gossypina 540390-
Allium sp. 538786-538787 Alnus sinuata 540381	540393
Alnus sinuata 540381	Astracantha microcephala
Alopecurus arundinaceus 538790-	540394-540395
538791	Astracantha parrowiana 540396
Alopecurus pratensis 538788	Astragalus falcatus 538798-
Alopecurus sp. 538789	538799
Alysicarpus vaginalis 538329	Astragalus onobrychis 538802
Amaranthus caudatus 538792	Astragalus sp. 540397-540398
Amaranthus cruentus 538255,	Atalantia ceylanica 539144
538319-538321,538795	Atalantia citroides 539145
Amaranthus graecizans 538793	Atalantia sp. 539146
Amaranthus hybrid 538322-	Atalantia sp. 539146 Avena fatua 538801
538327	Avena sativa 537116,537436,
Amaranthus hybridus 540447	538412,538414,538523,539874-
Amaranthus hypochondriacus	539880,540399
540444,540446	Avena sp. 538332,538800
Amaranthus lividus 538794	Avenula pubescens 538803-
Amaranthus powellii 538796	538804
Amaranthus spinosus 538797	Balsamocitrus dawei 539147
Amaranthus viridis 540445	Beckmannia sp. 538805
Ananas ananassoides 536868-	Beckmannia syzigachne 538806,
536872	540423
Ananas bracteatus 536873-	Beta vulgaris 538250,540886-
536875,536981	540893
Ananas bracteatus	Beta vulgaris subsp. maritima
var. bracteatus 536876-	538251,540560-540702
536877	Beta vulgaris var. macrocarpa
Ananas bracteatus var. tricolor	540557-540559
536878	Brassica chinensis 539935
Ananas comosus 536879-536979	Brassica juncea 537004-537008,
Ananas fritzmuelleri 536980	537018,537021
Ananas hybrid 536982-536983	Brassica napus 537090,537302,
Ananas lucidus 536984-536985	538766-538767,540457-540458
Ananas nanus 536986-536987	Brassica oleracea 539932

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Brassica oleracea var. botrytis 538029-538030,538765	539253 Citrus indica 539254 Citrus intermedia 539255 Citrus iyo 539256
Progriss rops 527001-527002	Citrus intermedia 539254
Brassica rapa 537001-537003, 537009-537016,537019-537020	Citrus intermedia 539255
Brassica tournefortii 537017	Citrus 1yo
Promue inormic 529907-529972	Citrus karaji 539237 539260
Bromus inermis 538807-538873	Citrus keraji 539269 Citrus kinokuni 539270
Bromus sp. 538874-538876 Bromus squarrosus 538877-	Citrus latifolia 539271-539275
Bromus squarrosus 538877-538878	
Buchloe dactyloides 539858	Citrus leiocarpa 539276 Citrus limetta 539277-539282
	Citrus limettioides 539283-
Calamagrostis epigeios 538879- 538881	539286 539283
Calamagrostis sp. 538882-	Citrus limon 539287-539334
538885	Citrus limonia 539335-539345
	Citrus longispina 539346
Calodendrum capense 539148 Carthamus tinctorius 537110-	Citrus lycopersiciformis
537111,537596-537712,538013,	539347
538025,538779 Carum sp. 538886	Citrus maderaspatana 539348 Citrus madurensis 539349-
Carum sp. 538886 Catharanthus roseus 538775-	539351 539349-
538778,540878-540879	539351 Citrus maxima
	Citrus maxima
Chrysanthemum coronarium 537091	Citrus medica var. sarcodactylis 539445
	.
Chrysopogon gryllus subsp. echinulatus 540426	
→	Citrus miaray 539447
Cichorium intybus 540875 Citropsis gilletiana 539149	Citrus meyeri 539447 Citrus miaray 539448 Citrus montana 539449 Citrus myrtifolia 539450-
Citrullus lanatus 539149	Citrus myrtifolia 539449
	Citrus myrtifolia 539450-539452
537276,537299,537460-537473, 538012	Citrus natsudaidai 539453
Citrullus sp. 537277,537300,	Citrus nippokoreana 539454
538888	Citrus nobilis 539455-539457
Citrus asahikan 539150	Citrus obovoidea 539458
Citrus aurantiifolia 539151-	Citrus otachibana 539459
539158	Citrus paradisi 539460-539490
Citrus aurantium 539159-539177	Citrus pyriformis 539491
Citrus benikoji 539178	Citrus reshni 539492
Citrus bergamia 539179-539180	Citrus reticulata 539493-
Citrus canaliculata 539181	539544
Citrus celebica 539182	Citrus rokugatsu 539545
Citrus clementina 539183-	Citrus shunkokan 539546
539186	Citrus sinensis 539547-539668
Citrus davaoensis 539187	Citrus sinograndis 539669
Citrus deliciosa 539188	Citrus sp. 539670-539674
Citrus depressa 539189	Citrus succosa 539675
Citrus erythrosa 539190-539191	Citrus sudachi 539676
Citrus excelsa 539192-539194	Citrus sulcata 539677
Citrus funadoko 539195	Citrus sunki 539678
Citrus halimii 539196-539197	Citrus tachibana 539679
Citrus hanaju 539198	Citrus taiwanica 539680-539681
Citrus hassaku 539199	Citrus tamurana 539682
Citrus hiroshimana 539200-	Citrus tangerina 539683
539201	Citrus tardiva 539684
Citrus hybrid 539202-539247	Citrus temple 539685
Citrus hystrix 539248-539250	Citrus tengu 539686
Citrus ichangensis 539251-	Citrus ujukitsu 539687

Citrus unshiu 539688-539690	537322
Citrus vitiensis 539691	Elymus trachycaulus
Citrus webberi 539692-539693	subsp. trachycaulus 537323
Citrus westeri 539694	Elytrigia intermedia 537117-
Citrus x tangelo 539695-539711	537126
Citrus yatsushiro 539712 Citrus yuko 539713 Clausena anisata 539714 Clausena excavata 539715 Clausena lansium 539716 Clitoria ternatea 538311	Elytrigia spicata 537364-
Citrus yuko 539713	537389,539873
Clausena anisata 539714	Eremocitrus glauca 539717
Clausena excavata 539715	Erianthus ravennae 540436
Clibaria barratas 539/16	Erianthus sp. 536648-536649
Cornus stolonifera	Eriogonum niveum 537595
var. occidentalis 540382	Eruca sativa 537022 Esenbeckia hartmanii 539718
Cucumis melo 537092,537390-	Esenbeckia runyonii 539719
537391,538018,540402-540413	Feroniella oblata 539720
Cucumis sativus 540414-540416	Festuca arundinacea 537104,
Cucumis sp. 537392,538889	537109,537114,537443,537445-
Cucurbita ecuadorensis 540895	537446,538006,538019,538028,
Cucurbita ficifolia 540901	538032,538246,538256,538330,
Cucurbita foetidissima 540736,	538931,539931,539933-539934,
540902-540903	540874
Cucurbita lundelliana 540896-	Festuca hybrid 536997
540898	Festuca longifolia 538247
Cucurbita martinezii 540899-	Festuca ovina 537103,538932-
540900	538934
Cucurbita moschata 537474-	Festuca pratensis 538935-
537475,540904-540906 Cucurbita pedatifolia 540737	538958 Festuca rubra 537102,537444,
Cucurbita pedatifolia 540/3/	
	1 538050-538060
Cucurbita pepo 54041/	538959-538960 Festuca rubra subsp. commutata
Cucurbita pepo 540417 Cucurbita sp. 537476-537565 Cucurbita texana 540907	Festuca rubra subsp. commutata
Cucurbita texana 540907	Festuca rubra subsp. commutata 537594
Cucurbita pepo 540417 Cucurbita sp. 537476-537565 Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281	Festuca rubra subsp. commutata 537594
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281 Cynodon dactylon 537064,538020, 539857	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721-
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451,	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721- 539722 Fortunella hindsii 539723- 539724
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278-537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451, 538331,538890-538919,540427-	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721- 539722 Fortunella hindsii 539723- 539724 Fortunella hybrid 539725-
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278-537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451, 538331,538890-538919,540427-540428	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721- 539722 Fortunella hindsii 539723- 539724 Fortunella hybrid 539725- 539726
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451, 538331,538890-538919,540427- 540428 Dactylis glomerata	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721- 539722 Fortunella hindsii 539723- 539724 Fortunella hybrid 539725- 539726 Fortunella japonica 539727
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451, 538331,538890-538919,540427- 540428 Dactylis glomerata subsp. glomerata 538920	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721-539722 Fortunella hindsii 539723-539724 Fortunella hybrid 539725-539726 Fortunella japonica 539727 Fortunella margarita 539728-
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451, 538331,538890-538919,540427- 540428 Dactylis glomerata subsp. glomerata 538920 Dactylis glomerata	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721- 539722 Fortunella hindsii 539723- 539724 Fortunella hybrid 539725- 539726 Fortunella japonica 539727 Fortunella margarita 539728- 539729
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451, 538331,538890-538919,540427- 540428 Dactylis glomerata subsp. glomerata 538920 Dactylis glomerata subsp. lobata 538921	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721- 539722 Fortunella hindsii 539723- 539724 Fortunella hybrid 539725- 539726 Fortunella japonica 539727 Fortunella margarita 539728- 539729 Fortunella obovata 539730
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451, 538331,538890-538919,540427- 540428 Dactylis glomerata subsp. glomerata 538920 Dactylis glomerata 538921 Dactylis glomerata 538921 Dactylis glomerata	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721- 539722 Fortunella hindsii 539723- 539724 Fortunella hybrid 539725- 539726 Fortunella japonica 539727 Fortunella margarita 539728- 539729 Fortunella obovata 539730 Fortunella polyandra 539731
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451, 538331,538890-538919,540427- 540428 Dactylis glomerata 538920 Dactylis glomerata 538920 Dactylis glomerata 538921 Dactylis glomerata 538921 Dactylis glomerata 538922	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721- 539722 Fortunella hindsii 539723- 539724 Fortunella hybrid 539725- 539726 Fortunella japonica 539727 Fortunella margarita 539728- 539729 Fortunella obovata 539730 Fortunella polyandra 539731 Galactia striata 538312-538314
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451, 538331,538890-538919,540427- 540428 Dactylis glomerata 538920 Dactylis glomerata 538920 Dactylis glomerata 538921 Dactylis glomerata 538921 Dactylis glomerata 538922 Daucus carota 537093,540418-	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721- 539722 Fortunella hindsii 539723- 539724 Fortunella hybrid 539725- 539726 Fortunella japonica 539727 Fortunella margarita 539728- 539729 Fortunella obovata 539730 Fortunella polyandra 539731 Galactia striata 538312-538314 Glycine max 537094-537096,
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451, 538331,538890-538919,540427- 540428 Dactylis glomerata 538920 Dactylis glomerata 538920 Dactylis glomerata 538921 Dactylis glomerata 538921 Dactylis glomerata 538922 Daucus carota 537093,540418- 540422	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721-539722 Fortunella hindsii 539723-539724 Fortunella hybrid 539725-539726 Fortunella japonica 539727 Fortunella margarita 539728-539729 Fortunella obovata 539730 Fortunella polyandra 539731 Galactia striata 538312-538314 Glycine max 537094-537096, 538024,538375-538410,538773-
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451, 538331,538890-538919,540427- 540428 Dactylis glomerata 538920 Dactylis glomerata 538920 Dactylis glomerata 538921 Dactylis glomerata 538921 Dactylis glomerata 538922 Daucus carota 537093,540418- 540422 Deschampsia caespitosa 538923-	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721-539722 Fortunella hindsii 539723-539724 Fortunella hybrid 539725-539726 Fortunella japonica 539727 Fortunella margarita 539728-539729 Fortunella obovata 539730 Fortunella polyandra 539731 Galactia striata 538312-538314 Glycine max 537094-537096, 538024,538375-538410,538773-538774,538781,539860-539867,
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451, 538331,538890-538919,540427- 540428 Dactylis glomerata 538920 Dactylis glomerata 538920 Dactylis glomerata 538921 Dactylis glomerata 538921 Dactylis glomerata 538922 Daucus carota 537093,540418- 540422 Deschampsia caespitosa 538923- 538930	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721- 539722 Fortunella hindsii 539723- 539724 Fortunella hybrid 539725- 539726 Fortunella japonica 539727 Fortunella margarita 539728- 539729 Fortunella obovata 539730 Fortunella polyandra 539731 Galactia striata 538312-538314 Glycine max 537094-537096, 538024,538375-538410,538773- 538774,538781,539860-539867, 539936,540451-540456,540551-
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451, 538331,538890-538919,540427- 540428 Dactylis glomerata 538920 Dactylis glomerata 538920 Dactylis glomerata 538921 Dactylis glomerata 538921 Dactylis glomerata 538921 Dactylis glomerata 538922 Daucus carota 537093,540418- 540422 Deschampsia caespitosa 538923- 538930 Digitaria sanguinalis 537575	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721- 539722 Fortunella hindsii 539723- 539724 Fortunella hybrid 539725- 539726 Fortunella japonica 539727 Fortunella margarita 539728- 539729 Fortunella obovata 539730 Fortunella polyandra 539731 Galactia striata 538312-538314 Glycine max 537094-537096, 538024,538375-538410,538773- 538774,538781,539860-539867, 539936,540451-540456,540551- 540556,540739-540740,540876-
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451, 538331,538890-538919,540427- 540428 Dactylis glomerata 538920 Dactylis glomerata 538920 Dactylis glomerata 538921 Dactylis glomerata 538921 Dactylis glomerata 538921 Dactylis glomerata 538922 Daucus carota 537093,540418- 540422 Deschampsia caespitosa 538930 Digitaria sanguinalis 537575 Elymus glaucus 537311	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721- 539722 Fortunella hindsii 539723- 539724 Fortunella hybrid 539725- 539726 Fortunella japonica 539727 Fortunella margarita 539728- 539729 Fortunella obovata 539730 Fortunella polyandra 539731 Galactia striata 538312-538314 Glycine max 537094-537096, 538024,538375-538410,538773- 538774,538781,539860-539867, 539936,540451-540456,540551- 540556,540739-540740,540876- 540877,540880-540884 Glycine soja 538411
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451, 538331,538890-538919,540427- 540428 Dactylis glomerata 538920 Dactylis glomerata 538920 Dactylis glomerata 538921 Dactylis glomerata 538921 Dactylis glomerata 538921 Dactylis glomerata 538922 Daucus carota 537093,540418- 540422 Deschampsia caespitosa 538930 Digitaria sanguinalis 537575 Elymus glaucus 537311	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721- 539722 Fortunella hindsii 539723- 539724 Fortunella hybrid 539725- 539726 Fortunella japonica 539727 Fortunella margarita 539728- 539729 Fortunella obovata 539730 Fortunella polyandra 539731 Galactia striata 538312-538314 Glycine max 537094-537096, 538024,538375-538410,538773- 538774,538781,539860-539867, 539936,540451-540456,540551- 540556,540739-540740,540876- 540877,540880-540884 Glycine soja 538411
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451, 538331,538890-538919,540427- 540428 Dactylis glomerata 538920 Dactylis glomerata 538920 Dactylis glomerata 538921 Dactylis glomerata 538921 Dactylis glomerata 538921 Dactylis glomerata 538922 Daucus carota 537093,540418- 540422 Deschampsia caespitosa 538923- 538930 Digitaria sanguinalis 537575 Elymus glaucus 537311 Elymus lanceolatus 537312- 537315 Elymus lanceolatus	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721- 539722 Fortunella hindsii 539723- 539724 Fortunella hybrid 539725- 539726 Fortunella japonica 539727 Fortunella margarita 539728- 539729 Fortunella obovata 539730 Fortunella polyandra 539731 Galactia striata 538312-538314 Glycine max 537094-537096, 538024,538375-538410,538773- 538774,538781,539860-539867, 539936,540451-540456,540551- 540556,540739-540740,540876- 540877,540880-540884 Glycine soja 538411 Glycine tabacina 537285-537293 Glycine tomentella 537294
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451, 538331,538890-538919,540427- 540428 Dactylis glomerata 538920 Dactylis glomerata 538920 Dactylis glomerata 538921 Dactylis glomerata 538921 Dactylis glomerata 538921 Dactylis glomerata 538922 Daucus carota 537093,540418- 540422 Deschampsia caespitosa 538923- 538930 Digitaria sanguinalis 537575 Elymus glaucus 537311 Elymus lanceolatus 537315 Elymus lanceolatus 537316-	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721- 539722 Fortunella hindsii 539723- 539724 Fortunella hybrid 539725- 539726 Fortunella japonica 539727 Fortunella margarita 539728- 539729 Fortunella obovata 539730 Fortunella polyandra 539731 Galactia striata 538312-538314 Glycine max 537094-537096, 538024,538375-538410,538773- 538774,538781,539860-539867, 539936,540451-540456,540551- 540556,540739-540740,540876- 540877,540880-540884 Glycine soja 538411 Glycine tabacina 537285-537293 Glycine tomentella 537294 Gossypium hirsutum 538033,
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451, 538331,538890-538919,540427- 540428 Dactylis glomerata 538920 Dactylis glomerata 538920 Dactylis glomerata 538921 Dactylis glomerata 538921 Dactylis glomerata 538922 Daucus carota 537093,540418- 540422 Deschampsia caespitosa 538923- 538930 Digitaria sanguinalis 537575 Elymus glaucus 537311 Elymus lanceolatus 537315 Elymus lanceolatus 537316- 537320	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721-539722 Fortunella hindsii 539723-539724 Fortunella hybrid 539725-539726 Fortunella japonica 539727 Fortunella margarita 539728-539729 Fortunella obovata 539730 Fortunella polyandra 539731 Galactia striata 538312-538314 Glycine max 537094-537096, 538024,538375-538410,538773-538774,538781,539860-539867, 539936,540451-540456,540551-540556,540739-540740,540876-540877,540880-540884 Glycine soja 538411 Glycine tabacina 537285-537293 Glycine tomentella 537294 Gossypium hirsutum 538033, 539918,539938,540254-540310,
Cucurbita texana 540907 Cyamopsis tetragonoloba 537278- 537281 Cynodon dactylon 537064,538020, 539857 Dactylis glomerata 537451, 538331,538890-538919,540427- 540428 Dactylis glomerata 538920 Dactylis glomerata 538920 Dactylis glomerata 538921 Dactylis glomerata 538921 Dactylis glomerata 538921 Dactylis glomerata 538922 Daucus carota 537093,540418- 540422 Deschampsia caespitosa 538923- 538930 Digitaria sanguinalis 537575 Elymus glaucus 537311 Elymus lanceolatus 537315 Elymus lanceolatus 537316-	Festuca rubra subsp. commutata 537594 Festuca rupicola 538961-538965 Fortunella crassifolia 539721- 539722 Fortunella hindsii 539723- 539724 Fortunella hybrid 539725- 539726 Fortunella japonica 539727 Fortunella margarita 539728- 539729 Fortunella obovata 539730 Fortunella polyandra 539731 Galactia striata 538312-538314 Glycine max 537094-537096, 538024,538375-538410,538773- 538774,538781,539860-539867, 539936,540451-540456,540551- 540556,540739-540740,540876- 540877,540880-540884 Glycine soja 538411 Glycine tabacina 537285-537293 Glycine tomentella 537294 Gossypium hirsutum 538033,

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Hedysarum sp.	538967	Luffa acutangula 540918-	540919
Helianthus hybrid	539881-	Luffa aegyptiaca	540920
539914		Luffa graveolens	540921
Hibiscus cannabinus	538258	Lupinus angustifolius	537713
Hibiscus sabdariffa	538259-	Lycopersicon esculentum	
538260		538979-538980,539919	,
Hordeum vulgare 536646	537305-	Malus domestica 536989-	536990
537306,537394,537437		537000	330330,
			E40430
537442,537569-537574		Malva sp.	540429
537967,538004,538015		Medicago arabica 537127-	
538761,539103-539140	,539917,		537130
540400			537131
Indigofera hirsuta	538328	Medicago doliata 537132-	
Ipomoea abrupta 538261	,538263	Medicago heyniana	537135-
Ipomoea argillicola	538264-	537136	
538265		Medicago hybrida	538998
Ipomoea batatas 538282	-538309.		537137-
538342-538354,539141		537225	00,20,
Ipomoea carnea	540703		540430-
Ipomoea cordatotriloba		540431	340430-
			E272E6
Ipomoea costata 538266	-53826/		537256,
Ipomoea gracilis 538268	-538270	538999	
Ipomoea hastifolia	538271		537259,
Ipomoea macrantha	538262	538021	
Ipomoea muelleri 538272	-538274	Medicago polymorpha	
Ipomoea nil 540704	-540707		539000
Ipomoea polpha 538275	-538277 l		537226
Ipomoea ramosissima	540711-	Medicago rigidula	537227-
540714	010/11	537235	00/22/
Ipomoea saintronanensis	538278	Medicago rotata 537236-	.F27227
		Medicago rotata 537230	537440-
Ipomoea squamosa	540709		
Ipomoea squamosa	540708	537441,538334-538336,	
Ipomoea trifida 540715		539003,540449-540450,	
Ipomoea triloba 538279	-538280,	Medicago sativa nsubsp.	varıa
540731		539004-539007	
Ipomoea x leucantha	540732-	Medicago sativa subsp. f	alcata
540735		538981-538997	
Koeleria gracilis	538968-	Medicago secundiflora	537238-
538975		537239	
Lactuca sativa 536692	-536864.		537240-
537105,538005,538034		537246	00,210
539939	,000,00,	Medicago sp. 539008-	539009
Lagenaria siceraria	540908-	Melilotus albus 539010-	539005
540917	340300		
	540443		53901/-
Leymus arenarius	540441	539022	500700
Leymus cinereus 537324	-53/356	-	539733
Leymus hybrid 537361	-537363	Microcitrus australasica	l
Leymus triticoides	537357-	539734-539736	
537360		Microcitrus australis	539737-
Limonia acidissima	539732	539739	
Linum usitatissimum	539915-	Microcitrus hybrid	539740
539916	Ĭ	Microcitrus inodora	539741-
Lolium multiflorum	537260	539742	
Lolium perenne 537452		Microcitrus warburgiana	539743
537566-537568,538976			539744
Lotus corniculatus			539745
Lotus sp. 538977		Murraya paniculata	539746
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Murraya paniculata	Prunus tenella	540442
var. ovatifoliolata 539747	Prunus triloba	536684
Naringi crenulata 539748	Prunus x yedoensis	536865
Nicotiana tabacum 537049-	Pyrus amygdaliformis	540922-
537059,537447	540941	
Onobrychis arenaria	Pyrus betulifolia	540942-
subsp. sibirica 539023-	541007	
539025	Pyrus boissieriana	
Onobrychis sp. 539026-539027	Pyrus calleryana 541009	-541111
Operculina aequisepala 538281	Pyrus calleryana	
Oryza sativa 536645,538016-	f. graciliflora	541112-
538017,538031,538248-538249,	541113	
538253-538254	Pyrus communis 541114	-541158,
Pamburus missionis 539749	541161-541288,541291	
Panicum miliaceum 539028	Pyrus communis subsp. c	
Panicum virgatum 537588	541289-541290	
Pennisetum glaucum 537065-	Pyrus hybrid 541159	-541160
537073,537113,537577-537587,	Rhynchosia minima	
538413,538762,540550	538316	
Pennisetum lanatum 540432	Rosa moschata	540435
Pennisetum sieberianum 537074-	Rosa spinosissima	539064
537075	Ruta graveolens	539792
Pennisetum violaceum 537076-	Saccharum officinarum	536650-
537077	536656	330030
Phacelurus speciosus 540433	Saccharum sinense	536657
Phalaris arundinacea 539029-	Saccharum spontaneum	536658-
539030	536674	330030
Phaseolus lunatus 537108	Severinia buxifolia	539793-
Phaseolus vulgaris 537106-	539799	539793
537107,538026-538027,539928-	Solanum chacoense	537025
539929		537025
	Solanum doddsii	537026
Phaseolus vulgaris	Solanum gourlayi	537026
var. vulgaris 538769-538772	Solanum oplocense	
Phleum phleoides 539031	Solanum pinnatisectum	537023
Phleum pratense 539033-539039	Solanum sp.	540738
Phleum sp. 539032	Solanum tuberosum	537024,
Piptatherum gracile 540434	537029-537048	E2700E
Pisum sativum 538022,538355-	Sorghum bicolor 537078	
538359,538764,538780,540459	537308-537309,537395	-53/434,
Poa alpina 540425	537455-537459,537714	-53/966,
Poa pratensis 536996,537304,	538245,538337,538360	
537435,538252,539040-539062,	539940-540252,540313	
539856	540549,540793-540824	
Poa trivialis 537439	Sorghum halepense	539065-
Poncirus trifoliata 539750-	539066	
539791	1 -	537086
Potentilla sp. 539063	Sorghum sp.	538752
Prunus armeniaca 536679-536680,		540383
536683,536686	Stellaria graminea	539067
Prunus avium 536675	,	-539075
Prunus domestica 536688-536691	Stipa sibirica 539076	
Prunus hybrid 536677-536678		-539086
Prunus persica 536676,536681-	1	-537298
536682,536685,536687	Syringa villosa	540443
Prunus serrulata	Teramnus labialis	538317-
var. lannesiana 536866-	538318	510051
536867	Trifolium ambiguum	540894

Trifolium hybrid 536998 Trifolium lupinaster 539087- 539089 Trifolium pratense 539090- 539098,540437 Trifolium repens 539099-539101 Trifolium sp. 539102,540438- 540439 Trifolium vesiculosum 537450 Trigonella gracilis 540440 Triphasia trifolia 539800 Triticum aestivum 536991- 536995,537261-537263,537303, 537307,537968-537979,538257, 538768,540401 Triticum araraticum 538415- 538522 Triticum boeoticum 538524- 538625 Triticum boeoticum 537998- 538003 Triticum duroum 537310,537980- 537997 Triticum durum 537310,537980- 537997 Triticum monococcum 538720- 538723 Triticum urartu 538724-538751 UNIDENT-Fabaceae sp. 537301, 538887 Verbena x hybrida 538023 Vetiveria sp. 536999 Vetiveria zizanioides 537061, 538753-538757 Vigna aconitifolia 537282 Vigna radiata 537283 Vigna umbellata 537284 Vigna unguiculata 537890- 539807 X Citromicrocitrus sp. 539808 X Citromicrocitrus sp. 539808 X Citromicrocitrus sp. 539808 X Citromicrocitrus sp. 539808 X Citromicrocitrus sp. 539848 X Fortucitrocirus sp. 539848 X Fortucitrocirus sp. 539855 X Microcirus sp. 539855 X Pseudoroetrigia sp. 536647, 540253 Zea mays subsp. mays 537097-		
Trifolium pratense 539090- 539098,540437 Trifolium repens 539099-539101 Trifolium sp. 539102,540438- 540439 Trifolium vesiculosum 537450 Trigonella gracilis 540440 Triphasia trifolia 539800 Triticum aestivum 536991- 536995,537261-537263,537303, 537307,537968-537979,538257, 538768,540401 Triticum araraticum 538415- 538522 Triticum boeoticum 538524- 538625 Triticum boeoticum 53798- 538003 Triticum dicoccoides 538626- 538719 Triticum durum 537310,537980- 537997 Triticum hybrid 537060 Triticum monococcum 538720- 538723 Triticum urartu 538724-538751 UNIDENT-Fabaceae sp. 537301, 53887 Verbena x hybrida 538023 Vetiveria sp. 536999 Vetiveria zizanioides 537061, 538753-538757 Vigna aconitifolia 537282 Vigna radiata 537283 Vigna umbellata 537284 Vigna unguiculata subsp. unguiculata subsp. unguiculata subsp. unguiculata subsp. unguiculata subsp. unguiculata 537087- 539807 X Citromicrocitrus sp. 539808 X Citroncirus sp. 539808 X Citroncirus sp. 539807 X Citromicrocitrus sp. 539808 X Citroncirus sp. 539848 X Fortucitrocirus sp. 539848 X Fortucitrocirus sp. 539849- 539853 X Microcirus sp. 539854 X Microcirus sp. 539855 X Pseudoroetrigia sp. 539855		
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Trifolium repens 539099-539101 Trifolium sp. 539102,540438- 540439 Trifolium vesiculosum 537450 Trigonella gracilis 540440 Triphasia trifolia 539800 Triticum aestivum 536991- 536995,537261-537263,537303, 537307,537968-537979,538257, 538768,540401 Triticum araraticum 538415- 538522 Triticum boeoticum 538524- 538625 Triticum boeoticum 537998- 538003 Triticum dicoccoides 538626- 538719 Triticum durum 537310,537980- 537997 Triticum hybrid 537060 Triticum urartu 538724-538751 UNIDENT-Fabaceae sp. 537301, 538887 Verbena x hybrida 538023 Vetiveria sp. 536999 Vetiveria zizanioides 537061, 538753-538757 Vigna aconitifolia 537282 Vigna unguiculata 537284 Vigna unguiculata 537284 Vigna unguiculata 537284 Vigna unguiculata 537087- 537089 X Citremocitrus sp. 539801 X Citrofortunella sp. 539802- 539807 X Citromicrocitrus sp. 539808 X Citroncirus sp. 539809- 539847 X Coleara sp. 539848 X Fortucitrocirus sp. 539849- 539853 X Microcirus sp. 539854 X Microcirus sp. 539854 X Microcirus sp. 539855 X Pseudoroetrigia sp. 539855 X Pseudoroetrigia sp. 5398563 X Triticosecale sp. 538763 X Triticosecale sp. 538763 X Triticosecale sp. 536647, 540253		539090-
Trifolium sp. 539102,540438- 540439 Trifolium vesiculosum 537450 Trigonella gracilis 540440 Triphasia trifolia 539800 Triticum aestivum 536991- 536995,537261-537263,537303, 537307,537968-537979,538257, 538768,540401 Triticum araraticum 538415- 538522 Triticum boeoticum 538524- 538625 Triticum boeoticum 537998- 538003 Triticum dicoccoides 538626- 538719 Triticum durum 537310,537980- 537997 Triticum hybrid 537060 Triticum monococcum 538720- 538723 Triticum urartu 538724-538751 UNIDENT-Fabaceae sp. 537301, 538887 Verbena x hybrida 538023 Vetiveria sp. 536999 Vetiveria zizanioides 537061, 538753-538757 Vigna aconitifolia 537282 Vigna radiata 537283 Vigna umbellata 537284 Vigna unguiculata 537087- 537089 X Citremocitrus sp. 539801 X Citrofortunella sp. 539802- 539807 X Citromicrocitrus sp. 539808 X Citroncirus sp. 539809- 539847 X Coleara sp. 539848 X Fortucitrocirus sp. 539849- 539853 X Microcirus sp. 539855 X Pseudoroetrigia sp. 5398763 X Triticosecale sp. 538763 X Triticosecale sp. 536647, 540253		
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Trifolium vesiculosum 537450 Trigonella gracilis 540440 Triphasia trifolia 539800 Triticum aestivum 536991-		,540438-
Trigonella gracilis 540440 Triphasia trifolia 539800 Triticum aestivum 536991-		
Triphasia trifolia 539800 Triticum aestivum 536991- 536995,537261-537263,537303, 537307,537968-537979,538257, 538768,540401 Triticum araraticum 538415- 538522 Triticum boeoticum 538524- 538625 Triticum boeoticum 537998- 538003 Triticum dicoccoides 538626- 538719 Triticum durum 537310,537980- 537997 Triticum hybrid 537060 Triticum urartu 538724-538751 UNIDENT-Fabaceae sp. 537301, 538887 Verbena x hybrida 538023 Vetiveria sp. 536999 Vetiveria zizanioides 537061, 538753-538757 Vigna aconitifolia 537282 Vigna radiata 537283 Vigna umbellata 537283 Vigna unguiculata 537087- 537089 X Citremocitrus sp. 539801 X Citrofortunella sp. 539802- 539807 X Citromicrocitrus sp. 539808 X Citroncirus sp. 539808 X Citroncirus sp. 539848 X Fortucitrocirus sp. 539849- 539853 X Microcitronella sp. 539855 X Pseudoroetrigia sp. 539855 X Pseudoroetrigia sp. 538763 X Triticosecale sp. 538763 X Triticosecale sp. 538763 X Triticosecale sp. 538763		
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536995,537261-537263,537303, 537307,537968-537979,538257, 538768,540401 Triticum araraticum 538522 Triticum boeoticum 538625 Triticum boeoticum 538903 Triticum dicoccoides 538719 Triticum durum 537310,537980- 537997 Triticum monococcum 538723 Triticum urartu 538724-538751 UNIDENT-Fabaceae sp. 537301, 538887 Verbena x hybrida 538023 Vetiveria sp. Vetiveria zizanioides 538753-538757 Vigna aconitifolia 537282 Vigna radiata 537283 Vigna umbellata 537284 Vigna unguiculata 537087 X Citromicrocitrus sp. 539807 X Citromicrocitrus sp. 539807 X Citromicrocitrus sp. 539808 X Citroncirus sp. 539809- 539847 X Coleara sp. 539848 X Fortucitrocirus sp. 539849- 539853 X Microcitronella sp. 539855 X Pseudoroetrigia sp. 539855	Triphasia trifolia	
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### Samon	536995,537261-537263	,537303,
Triticum araraticum 538415- 538522 Triticum boeoticum 538524- 538625 Triticum boeoticum 537998- 538003 Triticum dicoccoides 538626- 538719 Triticum durum 537310,537980- 537997 Triticum hybrid 537060 Triticum monococcum 538720- 538723 Triticum urartu 538724-538751 UNIDENT-Fabaceae sp. 537301, 538887 Verbena x hybrida 538023 Vetiveria sp. 536999 Vetiveria zizanioides 537061, 538753-538757 Vigna aconitifolia 537282 Vigna radiata 537283 Vigna umbellata 537284 Vigna unguiculata 537087- 537089 X Citremocitrus sp. 539801 X Citrofortunella sp. 539802- 539807 X Citromicrocitrus sp. 539808 X Citromicrocitrus sp. 539809- 539847 X Coleara sp. 539848 X Fortucitrocirus sp. 539849- 539853 X Microcirus sp. 539855 X Pseudoroetrigia sp. 539855 X Pseudoroetrigia sp. 538763 X Triticosecale sp. 536647, 540253	537307,537968-537979	,538257,
Triticum boeoticum	538768,540401	
Triticum boeoticum		538415-
Triticum boeoticum subsp. boeoticum 537998- 538003 Triticum dicoccoides 538626- 538719 Triticum durum 537310,537980- 537997 Triticum hybrid		======
Triticum boeoticum subsp. boeoticum 537998- 538003 Triticum dicoccoides 538626- 538719 Triticum durum 537310,537980- 537997 Triticum hybrid	Triticum boeoticum	538524-
subsp. boeoticum 537998- 538003 Triticum dicoccoides 538626- 538719 Triticum durum 537310,537980- Triticum dybrid 537060 Triticum monococcum 538720- 538723 Triticum urartu 538724-538751 UNIDENT-Fabaceae sp. 537301, 538887 536999 Verbena x hybrida 538023 Vetiveria sp. 536999 Vetiveria zizanioides 537061, 538753-538757 537282 Vigna aconitifolia 537282 Vigna radiata 537284 Vigna umbellata 537284 Vigna umguiculata 537087- 537089 X Citremocitrus sp. 539802- X Citrofortunella sp. 539802- 539807 X Citromicrocitrus sp. 539808- X Coleara sp. 539848 X Fortucitrocirus sp. 539849- 539853 X Microcitronella sp. 539855 X Pseudoroetrigia sp. 539856 X Triticosecale sp. 536647, 540253		
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Triticum hybrid 537060 Triticum monococcum 538720- 538723 Triticum urartu 538724-538751 UNIDENT-Fabaceae sp. 537301, 538887 Verbena x hybrida 538023 Vetiveria sp. 536999 Vetiveria zizanioides 537061, 538753-538757 Vigna aconitifolia 537282 Vigna radiata 537283 Vigna umbellata 537284 Vigna unguiculata 537087- 537089 X Citremocitrus sp. 539801 X Citrofortunella sp. 539802- 539807 X Citromicrocitrus sp. 539808 X Citromicrocitrus sp. 539808 X Citroncirus sp. 539809- 539847 X Coleara sp. 539848 X Fortucitrocirus sp. 539848 X Fortucitrocirus sp. 539849- 539853 X Microcirus sp. 539855 X Pseudoroetrigia sp. 539855 X Pseudoroetrigia sp. 538763 X Triticosecale sp. 536647, 540253		
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Triticum monococcum		
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UNIDENT-Fabaceae sp. 537301, 538887 Verbena x hybrida 538023 Vetiveria sp. 536999 Vetiveria zizanioides 537061, 538753-538757 Vigna aconitifolia 537282 Vigna radiata 537283 Vigna umbellata 537284 Vigna unguiculata 537087-537089 X Citremocitrus sp. 539801 X Citrofortunella sp. 539802-539807 X Citromicrocitrus sp. 539808 X Citroncirus sp. 539808 X Citroncirus sp. 539848 X Fortucitrocirus sp. 539848 X Fortucitrocirus sp. 539849-539853 X Microcirus sp. 539855 X Pseudoroetrigia sp. 539855 X Pseudoroetrigia sp. 538763 X Triticosecale sp. 536647, 540253		
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Vetiveria sp. 536999 Vetiveria zizanioides 537061,		
Vetiveria zizanioides 537061, 538753-538757 Vigna aconitifolia 537282 Vigna radiata 537283 Vigna umbellata 537284 Vigna unguiculata 537087-537089 X Citremocitrus sp. 539801 X Citrofortunella sp. 539802-539807 X Citromicrocitrus sp. 539808 X Citroncirus sp. 539808 X Citroncirus sp. 539848 X Fortucitrocirus sp. 539848 X Fortucitrocirus sp. 539848 X Fortucitrocirus sp. 539855 X Microcitronella sp. 539855 X Pseudoroetrigia sp. 538763 X Triticosecale sp. 536647, 540253		
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Vigna radiata 537283 Vigna umbellata 537284 Vigna unguiculata subsp. unguiculata 537087-537089 X Citremocitrus sp. 539801 X Citrofortunella sp. 539802-539807 X Citromicrocitrus sp. 539808 X Citroncirus sp. 539809-539847 X Coleara sp. 539848 X Fortucitrocirus sp. 539848 X Fortucitrocirus sp. 539849-539853 X Microcirus sp. 539855 X Pseudoroetrigia sp. 538763 X Triticosecale sp. 536647,540253		
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<pre>subsp. unguiculata 537087- 537089 X Citremocitrus sp.</pre>		537284
537089 X Citremocitrus sp. 539801 X Citrofortunella sp. 539802- 539807 X Citromicrocitrus sp. 539808 X Citroncirus sp. 539809- 539847 X Coleara sp. 539848 X Fortucitrocirus sp. 539849- 539853 X Microcirus sp. 539854 X Microcitronella sp. 539855 X Pseudoroetrigia sp. 538763 X Triticosecale sp. 536647, 540253		
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<pre>X Citrofortunella sp. 539802- 539807 X Citromicrocitrus sp. 539808 X Citroncirus sp. 539809- 539847 X Coleara sp. 539848 X Fortucitrocirus sp. 539849- 539853 X Microcirus sp. 539854 X Microcitronella sp. 539855 X Pseudoroetrigia sp. 538763 X Triticosecale sp. 536647, 540253</pre>		
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<pre>X Citromicrocitrus sp. 539808 X Citroncirus sp. 539809-</pre>		539802-
<pre>X Citroncirus sp. 539809- 539847 X Coleara sp. 539848 X Fortucitrocirus sp. 539849- 539853 X Microcirus sp. 539854 X Microcitronella sp. 539855 X Pseudoroetrigia sp. 538763 X Triticosecale sp. 536647, 540253</pre>		
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<pre>X Microcirus sp. 539854 X Microcitronella sp. 539855 X Pseudoroetrigia sp. 538763 X Triticosecale sp. 536647, 540253</pre>		539849-
<pre>X Microcitronella sp. 539855 X Pseudoroetrigia sp. 538763 X Triticosecale sp. 536647, 540253</pre>		
X Pseudoroetrigia sp. 538763 X Triticosecale sp. 536647, 540253		
X Triticosecale sp. 536647, 540253	X Microcitronella sp.	539855
540253	X Pseudoroetrigia sp.	
		536647,
Zea mays subsp. mays 537097-		50505
	zea mays subsp. mays	537097-

537101,538007-538011,538228-538244,538338-538341,539859, 539868-539872,539920-539927, 539930,540311-540312,540462-540466,540741-540792

Common Name Cross Reference

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Alfalfa 537115,537440	-537441,	Citrumelo 539822-539830
538021,538334-538336		Citrus relative 539142-539149,
530003 540440-540450	5/0973	539714-539720,539732-539733,
Almond	536684	539744-539749,539792-539801
Almond Alpine bluegrass Alyceclover Amaranth Amaranthus	540425	Citrus relative hybrid 539848
Alucaciovar	538329	Clover 537450
Amaranth	530323	Clover 537450 Colonial bluegrass 538785
Amaranthua	530233	Common oat 537116,537436,
Amariaan alausharaaa	536319	COMMINION OUT 53/116,53/436,
American sloughgrass	540423	538412,538414,538523,540399
Annual ryegrass Aparajita Apple 536989-536990 Apricot 536679-536680	53/260	Common wheat 537303,537307,
Aparajita	538311	537968-537979,538257,540401
Apple 536989-536990	,53/000	Corn 537097-537101,538007-
Apricot 5366/9-536680	,536683,	538011,538228-538244,538338-
536686		538341,539859,539868-539872,
Barley 536646,537305		539920-539927,539930,540311-
537394,537437-537438		540312,540741-540792
537569-537574,537576		Cotton 538033,539918,539938,
538004,538015,538760		540448,540872,540885
539103-539140,539917	,540400	Cowpea 537087-537089 Crabgrass 537575 Creek dogwood 540382
Basin wildrye 537324	537356	Crabgrass 537575
Beardless wildrye	537357-	Creek dogwood 540382
E272C0	1	Creeping foxtail 538790-538791
Bermudagrass 537064	.538020.	
		Cucumber 540414-540416 Dent corn 540462-540466
539857 Big bluestem 537393	537589	Durum wheat 537980-537997
Birdsfoot trefoil	538333	Durum wheat 537980-537997 Einkorn 538720-538723
Birdsfoot trefoil Bittersweet orange	530353	European dunegrass 540441
E20160	į.	Flav 520015-520016
Black medic 540430	-540421	Flax 539915-539916 Garden bean 537106-537107,
Black medic 540430	-540431	
Blood orange 539547	-53955/	538026-538027,538769-538771
Blue lupine	53//13	Garland chrysanthemum 537091
Bluebunch wheatgrass	5398/3	Grapefruit 539200,539460-
Bluebunch wheatgrass Bluegrass Bottle gourd 540908	53/439	539488
Bottle gourd 540908	-54091/	Grapefruit hybrid 539201-
	-537008,	539203,539459,539489-539490,
537018		539546,539677,539682
	-540903	Guar 537278-537281
Buffalograss	539858	Hairy indigo 538328
Burnet rose	539064	Hard fescue 538247
Butterfly-pea	538310	Hardhack 540383
Calamondin 539349	-539351	Intermediate wheatgrass 537117-
Callery Pear 541016	,541018-	537126
541113		Japanese flowering cherry
Callery pear 541009	-541015,	536865
541017	'	Johnson grass 539065-539066
Carrot	537093	Kenaf 538258
	-538030,	Kentucky bluegrass 536996,
538765,539932		537304,537435,538252,539040-
Cherry	536675	539062,539856
Chewings fescue	537594	Kumquat 539721-539724,539727-
Chicory	540875	539731
	-539821	Kumquat hybrid 539725-539726,
Citron 539413-539443		539802-539807,539849-539853
	-539197,	Kura clover 540894
539444	JJJ15/,	Late lilac 540443
JJ7444		Date IIIac 340443

S39446 S39205-539211,	Lemon 539204,539287-539313,	Peanut 536988,537112,537264,
Lemon hybrid 539205-539211, 539314, 539345, 539447, 539491, 539670 Lemon-Eureka 539315-539325, 538668-539334 Lettuce 536692-536864, 537105, 538005, 538034, 539937, 539939, Lima bean 537108 Lime 539151-539158, 539188, 539187, 539212, 539271, 539275, 539346, 539629-539693, Lime hybrid 539121, 539214, 539831 Lime hybrid 539213-539214, 539681, 539687, 539492-539544, 539686, 539188-539193, 53984, 539586, 539188-539457, 539492-539544, 539567, 539492-539544, 539567, 539492-539544, 539567, 539492-539549, 539567, 539375, 539576, 539375, 539576, 539375, 539576, 539375, 539576, 539375, 53958, 539585, 539585, 539585, 539585, 539585, 539585, 539585, 539585, 539567, 539576, 539712 Lime hybrid 539183-539186, 539938, 53918, 539183-539184, 539567, 53949, 539569, 539188-53918, 539458, 539567, 539458, 539567, 539458, 539567, 539458, 539567, 539576, 539576, 539576, 539576, 539576, 539576, 539576, 539576, 539576, 539576, 539576, 539576, 539576, 539576, 539576, 539576, 539576, 539576, 539577,		
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Acronyms

For space conservation and consistency in identifying locations, the following acronyms have been used Plant Inventory 199:

CIMMYT - Centro Internacional de Mejoramiento de Maiz y Trigo (Mexico)

CIP - Centro Internacional de la Paja (Peru)

IBPGR - International Board for Plant Genetic Resources

ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

IFAS - Institute of Food and Agricultural Science (USA)

INRA - Institut National de la Recherche Agronomique (France)

IITA - International Institute of Tropical Agriculture

USDA-ARS - U.S. Department of Agriculture, Agricultural Research Service (USA)

USDA-SCS - U.S. Department of Agriculture, Soil Conservation Service (USA)

VIR - N.I. Vavilov Institute of Plant Industry (Soviet Union)