Plant Inventory
No. 199, Part I

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

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Issued June 1991
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. **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.
PI 536647-continued


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 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 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.  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


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 to 536674-continued

locality: Natural habitat, Tambon Ban Phong, Amphoe Ban Phong, Ratchaburi.  latitude: 13 deg. 50 min. N.  
longitude: 098 deg. 50 min. E.  elevation: 0m.  

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.  

locality: Roadside, natural habitat, Ban Phra Thomphon, Amphoe Nuang, Chumphon.  latitude: 10 deg. 50 min. N.  
longitude: 098 deg. 20 min. E.  elevation: 20m.  

locality: Roadside, natural habitat, Ban Siebyuan, Amphoe Muang, Chumphon.  latitude: 10 deg. 50 min. N.  
longitude: 098 deg. 20 min. E.  elevation: 20m.  

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.  

locality: Roadside, natural habitat, Tambon Parktang, Amphoe Muang, Phichit.  latitude: 16 deg. 30 min. N.  
longitude: 099 deg. 90 min. E.  elevation: 60m.  

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.  
PI 536658 to 536674-continued


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.


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


PI 536677 to 536678. Prunus hybrid ROSACEAE Peach

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


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 536681. Prunus persica (L.) Batsch ROSACEAE Peach

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


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.


PI 536683. Prunus armeniaca L. ROSACEAE Apricot

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.  
  - *other id:* Q 22870.  
  - Cultivar. Budwd.

- PI 536689  
  - *origin:* Yugoslavia.  
  - *other id:* Q 22872.  
  - Cultivar. Budwd.

- PI 536690  
  - *origin:* Yugoslavia.  
  - *cultivar:* POZEGACA P-25.  
  - *other id:* Q 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.  

- PI 536693  
  - *origin:* United States.  
  - *cultivar:* A 36.  

- 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.  

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 texture 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 536712  
**origin:** United States.  
**cultivar:** DEERTONGUE/MATCHLESS.  

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-blanced, 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 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 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.  

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 September; 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 commercial 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.  

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 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, 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 536692 to 536864-continued

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 536692 to 536864-continued

PI 536769  
origin: United States.  
cultivar: WALDMANS GREEN.  

PI 536770  
origin: United States.  
cultivar: WAYAHEAD.  

PI 536771  
origin: United States.  
cultivar: WHITE BOSTON MOSAIC TESTED.  

PI 536772  
origin: United States.  
cultivar: WHITE PARIS SELF-FOLDING COS.  

PI 536773  
origin: United States.  
cultivar: WINTERCROP.  

PI 536774  
origin: United States.  
cultivar: WINTER DENSITY.  

PI 536775  
origin: United States.  
cultivar: WOODS CABBAGE.  

PI 536776  
origin: United States.  
cultivar: NO 749.  
remarks: Maturity 82 days. Seeds white. Plants are comparable 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 536692 to 536864—continued

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 excellent 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:**

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:**

PI 536791  
**origin:** United States.  
**cultivar:** REGULAR GREAT LAKES.  
**remarks:**

PI 536792  
**origin:** United States.  
**cultivar:** USDA GRAND RAPIDS NO 1.  
**remarks:**

PI 536793  
**origin:** United States.  
**cultivar:** UNRIVALED.  
**remarks:**
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.  

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 serrations 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.  

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 plantings. Highly recommended for home as well as commercial use. Annual. Cultivar. Seed.

PI 536807  
**origin:** United States.  
**cultivar:** SUMMER BIBB.  

PI 536808  
**origin:** United States.  
**cultivar:** GREAT LAKES 65.  

PI 536809  
**origin:** United States.  
**cultivar:** GREAT LAKES 66.  


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 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 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 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 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: CHESIBBB. remarks: Matures 10-14 days earlier than Bibb when grown as greenhouse crop; 1 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.  

PI 536860  
**origin:** United States. **cultivar:** ICEBERG.  
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.

Cultivar. Seed.

PI 536864  origin: United States.  *cultivar*: PRIMAVERDE. *remarks*:
Slower bolting than Great Lakes 659. Heads solid, non-
puffy. 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

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.l. ARATAMA.  other id: Q
PI 536868 to 536872. Ananas ananassoides (Baker) L. B. Smith
BROMELIACEAE


PI 536873 to 536875. Ananas bracteatus (Lindley) Schultes f.
BROMELIACEAE


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 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  

PI 536882  

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

PI 536887

PI 536888

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

PI 536893

PI 536894

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 536879 to 536979-continued


PI 536897 origin: Colombia. cultivar: SANTA MARTA NO. 1. other id: HANA 22. remarks: Fr wt: 1701 to 2268 g, brix: 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 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. 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. 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. 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 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: 44 mg per 100 g.  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.  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  

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 g.  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: 11 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 536958  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:  Vietnam.  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.  

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%.  

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  

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  

PI 536976  

PI 536977  
PI 536879 to 536979-continued

PI 536978  
origin: United States.  
other id: HANA 160.  
Perennial.  
Breeding Material.  
Cutting.

PI 536979  
origin: United States.  
cultivar: 58-474.  
other id: HANA 161.  
Perennial.  
Breeding Material.  
Cutting.

PI 536980 to 536981. Ananas fritzmuelleri Camargo BROMELIACEAE


PI 536980  
origin: Brazil.  
cultivar: CB 73.  
collected: February 25, 1939.  
other id: HANA 89.  
locaity: 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.  
locaity: 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


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: F1 HYBRID CAMPINAS.  
collected: February 02, 1939.  
other id: HANA 79.  
locaity: Campinas Exp. Sta., Campinas.  
Perennial.  
Breeding Material.  
Cutting.

PI 536984 to 536985. Ananas lucidus Miller BROMELIACEAE


PI 536984  
origin: Brazil.  
cultivar: CB 2.  
collected: September 29, 1938.  
other id: HANA 63.  
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**


**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.

PI 536989  
**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 536990

**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, Manhattan, 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 abscisic acid applied at either seedling or adult stages. Lower stomatal resistance, higher variable leaf chlorophyll florescence, longer leaf area duration; greater crop growth rate, grain filling rate, kernel weight and grain yield then parent line under heat or drought 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

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 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.  

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.  

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.  

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


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.


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 537003. Brassica rapa L. BRASSICACEAE Turnip

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

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.


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 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 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.


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.


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 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.


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.


PI 537023. Solanum pinnatisectum Dunal SOLANACEAE


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.

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.


PI 537027. Solanum oplocense Hawkes  SOLANACEAE

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


PI 537028. Solanum doddsii Correll  SOLANACEAE

**Donated by:** Department of Plant Breeding & Biometry, Cornell University, Ithaca, New York, United States. Received August 23, 1989.
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 05-832, 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 537036 to 537039-continued


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 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.


PI 537045. Solanum tuberosum L. SOLANACEAE Potato


PI 537046 to 537048. Solanum tuberosum L. SOLANACEAE Potato


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.
PI 537060-continued

**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 Yamuna 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. Associated species: Ricinus communis, Phoenix dactylifora, Parkinsonia sp., pomegranate, Salvadora persica, Ficus sp. Fruits prepared in a green sauce. Part of fruit used to wash hair. Landrace. Seed.
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 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 Akrarereb 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.
donor 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 with grain. Soil pH 6.5-7.0. Reportedly originated from the Bagzane escarpment about 50 years ago. Wild. 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.

PI 537074 donor id: C019. origin: Niger. local name: Chibra (Tamacheq and Arabic languages). collected: November 20, 1986. 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 deg. 20 min. N. longitude: 8 deg. 42 min. E. elevation: 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 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: 881m. 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: 881m. 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

PI 537082
 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.

 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.

PI 537085  donor id: C118.  origin: Niger.  collector id: C118.  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.

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:** C111.  
**origin:** Niger.  
**local name:** Tenant (Tamacheq language).  
**collected:** December 02, 1986.  
**collector id:** C111.  
**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.  

PI 537089  
**donor id:** C119.  
**origin:** Niger.  
**collector id:** C119.  
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.  

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


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


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

PI 537096-continued


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


**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


**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


**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


**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 (1l/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 3020 kg 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-SAFFFLOWER.  **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 2.7 cm.  Seed hulls smooth and white.  Seed yield and seed oil percentage over 3 year averaged 2810 kg 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


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 Iniai 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


PI 537115. Medicago sativa L. FABACEAE Alfalfa


PI 537116. Avena sativa L. POACEAE Common oat

PI 537116-continued


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


PI 537127 to 537129. Medicago arabica (L.) Hudson 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 537127 to 537129-continued


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.


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.


PI 537132 to 537134. Medicago doliata Carmign. 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 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 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.


<table>
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<tr>
<th>PI</th>
<th>Donor ID</th>
<th>Origin</th>
<th>Collected</th>
<th>Collector ID</th>
<th>Locality</th>
<th>Type</th>
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<td>537158</td>
<td>1037</td>
<td>Italy</td>
<td>1963</td>
<td>1037</td>
<td>Between Siliqua and Iglesias, Sardinia</td>
<td>Annual</td>
<td>Wild</td>
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<td>537159</td>
<td>1086</td>
<td>Italy</td>
<td>1963</td>
<td>1086</td>
<td>South Elina, before Quartu, Sardinia</td>
<td>Annual</td>
<td>Wild</td>
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<td>537160</td>
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<td>Greece</td>
<td>1963</td>
<td>1113</td>
<td>Iraklion, 24km, Crete</td>
<td>Annual</td>
<td>Wild</td>
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<td>537161</td>
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<td>Greece</td>
<td>1963</td>
<td>1120</td>
<td>West of Nicolavs, 29km, Crete</td>
<td>Annual</td>
<td>Wild</td>
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<td>Seed</td>
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<td>1141</td>
<td>Greece</td>
<td>1963</td>
<td>1141</td>
<td>Road to Critsa, Crete</td>
<td>Annual</td>
<td>Wild</td>
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<td>Greece</td>
<td>1963</td>
<td>1182</td>
<td>Sea shore, Kotzynos-Pyrgos, Crete</td>
<td>Annual</td>
<td>Wild</td>
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<td>537164</td>
<td>1213</td>
<td>Greece</td>
<td>1963</td>
<td>1213</td>
<td>From Rhodos sea shore, half way to Petatoides, Rhodes</td>
<td>Annual</td>
<td>Wild</td>
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<td>537165</td>
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<td>1232</td>
<td>Old city, Kamiros, Rhodes</td>
<td>Annual</td>
<td>Wild</td>
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<td>537166</td>
<td>1249</td>
<td>Greece</td>
<td>1963</td>
<td>1249</td>
<td>Sea shore, across from old Rhodes cemetery, Rhodes</td>
<td>Annual</td>
<td>Wild</td>
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<td>537167</td>
<td>1253</td>
<td>Cyprus</td>
<td>1963</td>
<td>1253</td>
<td>Near Kythrea</td>
<td>Annual</td>
<td>Wild</td>
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<td>537168</td>
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<td>Cyprus</td>
<td>1963</td>
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<td>Near Kythrea</td>
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<td>537169</td>
<td>1279</td>
<td>Cyprus</td>
<td>1963</td>
<td>1279</td>
<td>Cape Andreas, near Monastery</td>
<td>Annual</td>
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<tr>
<td>537170</td>
<td>1320</td>
<td>Lebanon</td>
<td>1963</td>
<td>1320</td>
<td>Fabougha road, between Dahrel Baider and Tabel Knisch</td>
<td>Annual</td>
<td>Wild</td>
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<td><strong>PI</strong></td>
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<td><strong>origin:</strong></td>
<td><strong>collected:</strong></td>
<td><strong>collector id:</strong></td>
<td><strong>locality:</strong></td>
<td><strong>Annual. Wild. Seed.</strong></td>
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<td>537178</td>
<td>1624.</td>
<td>France.</td>
<td>1963.</td>
<td>1624.</td>
<td>Towards St. Paul de Fe, 5km from Estagel.</td>
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<td>537183</td>
<td>1795.</td>
<td>Italy.</td>
<td>1962.</td>
<td>1795.</td>
<td>San Martino, Sicily.</td>
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collector id: 2392. locality: Karpathos Airport, 

collector id: 2410. locality: From Sidi audet, 16km to 

collector id: 2419. locality: Road from Le Kef, 28km to 

collector id: 2429. locality: Road from Tajerouine, 14km 

collector id: 2442. locality: Ruins of Basilique 

collector id: 2444. locality: Road from Feriana, 28km to 

collector id: 2445. locality: Road from Gabes, 65-67km 

collector id: 2457. locality: Road from Adjim, 7km to 

collector id: 2469. locality: Between Maktar and 

collector id: 2471. locality: Road from Gabes, 47km to 

Wild. Seed.

collector id: 2512. locality: Beach, El-Djemila. 
Annual. Wild. Seed.

collector id: 2710a. locality: Road from El-Jadida, 24km 
to S. Smail. Annual. Wild. Seed.
PI 537137 to 537225-continued


collector id: 2753. locality: Road from Boulaouana, 56km to El-Jadida. Annual. Wild. Seed.

collector id: 2781. locality: Road from Temara to Ain el 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.


PI 537227 to 537235. Medicago rigidula (L.) All. 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 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.  
**locality:** Annual.  
Seed.

PI 537237  
**donor id:** 2003.  
**origin:** Syria.  
**origin institute:** Univ. of Aleppo.  
**locality:** Annual.  
Seed.

PI 537238 to 537239. Medicago secundiflora 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.

PI 537238  
**donor id:** 553.  
**origin:** France.  
**origin institute:** Botanical Garden, Montpellier.  
**locality:** Annual.  
Seed.

PI 537239  
**donor id:** 1914.  
**origin:** Canada.  
**origin institute:** Experimental Farm, Brandon, Manitoba.  
**locality:** 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 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 to 537256-continued


PI 537257 to 537259. Medicago murex Willd. 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 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.


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 to 537263-continued

PI 537263  
**origin:** United States.  
**cultivar:** NE84557.  
**pedigree:** Warrior/Scout/2/MoW6811/3/Agate sib/4/NE 68457/Centurk.  

PI 537264. *Arachis hypogaea* L.  
**FABACEAE**  
**Peanut**


**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**


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 537277. Citrullus sp. CUCURBITACEAE


PI 537278 to 537281. Cyamopsis tetragonoloba (L.) Taubert FABACEAE Guar


PI 537282. Vigna aconitifolia (Jacq.) Marechal FABACEAE Mothbean


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

PI 537283-continued


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


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

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


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


PI 537286 to 537293—continued


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


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.


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.

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.


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.


PI 537303. Triticum aestivum L. POACEAE Common wheat

PI 537303-continued


PI 537304. Poa pratensis L. POACEAE Kentucky bluegrass


PI 537305. Hordeum vulgare L. POACEAE Barley

PI 537305-continued

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. Heigth 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
Research Station, P.O. Box 3000, Main, Lethbridge,
Alberta T1J 4B1. 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
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 537310. Triticum durum Desf. POACEAE Durum wheat


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.


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 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 to 537320-continued


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 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.


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 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 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 537389


PI 537390 to 537391. Cucumis melo L. CUCURBITACEAE Melon


PI 537390

PI 537391

PI 537392. Cucumis sp. CUCURBITACEAE


PI 537393. Andropogon gerardii Vitman POACEAE Big bluestem

PI 537393-continued


PI 537394. Hordeum vulgare L. POACEAE Barley


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
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.  
Breeding Material.  Seed.

Breeding Material.  Seed.

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.  
Breeding Material.  Seed.
PI 537399  
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.  

PI 537400  
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.  

PI 537401  
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.  
PI 537402  
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.  

PI 537403  
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.  

PI 537404  
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.  


PI 537408  

PI 537409  

PI 537410  
PI 537411  

PI 537412  

PI 537413  
source: Crop Sci. 30(5):1168 1990.  group: CSR-SORGHUM.  


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  

Three-dwarf R-line germplasm with 50-80% green leaf color retention at maturity and resistance to insecticide burn.  
Uniformity to top of panicle.  Plant color tan.  Seed white and translucent.  Resistant to anthracnose  

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  
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.  

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.  

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.  
PI 537423

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.

PI 537424

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.

PI 537425

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.
cultivar: Tx2849.  pedigree: (Tx430*77CS3), 1-47-2-2-2-1.  


PI 537429  
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:  

PI 537430  
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:  

PI 537431  
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:  


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


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.


PI 537437 to 537438. Hordeum vulgare L. POACEAE Barley


PI 537438. *Hordeum distichum* L. SÉCACEAE Barley

**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.


PI 537442. Hordeum vulgare L.  POACEAE  Barley


PI 537443. Festuca arundinacea Schreber  POACEAE  Tall fescue

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, persistent 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


PI 537446. Festuca arundinacea Schreber POACEAE Tall fescue


PI 537447. Nicotiana tabacum L. SOLANACEAE Tobacco


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


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-1 Arrowleaf Clover Germplasm. Received February 04, 1990.


PI 537451. Dactylis glomerata L. POACEAE Orchardgrass


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:** 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(A1 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 pigmented 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 (A1 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 (A1 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 to 537459-continued

PI 537458  
**origin:** United States.  
**cultivar:** N125.  
**pedigree:** ICRISAT population/KHB.  

PI 537459  
**origin:** United States.  
**cultivar:** N126.  
**pedigree:** ICRISAT population/KHB.  

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 537460 to 537473-continued


PI 537474 to 537475. Cucurbita moschata (Duch.) Duch. ex Poir.  CUCURBITACEAE  Squash


PI 537476 to 537565. Cucurbita sp.  CUCURBITACEAE


PI 537517 donor id: CA-CU-60. origin: Spain. Seed.


PI 537520  donor id: CA-CU-63.  origin: Spain.  Seed.

PI 537521  donor id: CA-CU-64.  origin: Spain.  Seed.


PI 537525  donor id: CA-CU-68.  origin: Spain.  Seed.

PI 537526  donor id: CA-CU-70.  origin: Spain.  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 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. Used as food. Cultivar. Seed.


PI 537566. Lolium perenne L.  POACEAE  Perennial ryegrass


PI 537567. Lolium perenne L.  POACEAE  Perennial ryegrass

PI 537567-continued


PI 537568. Lolium perenne L. POACEAE Perennial ryegrass


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 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.  
group: CSR-BARLEY.  

PI 537574  
origin: United States.  
origin institute: Georgia Agr. Exp. Sta., Dept. of Plant Pathology, Univ. of Georgia, Griffin, Georgia 30223.  
pedigree: Volbar/Atlas 66.  
other id: GA 79-629.  
other id: GP-128.  
group: CSR-BARLEY.  

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.  
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.  
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 pennisetii). 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.  
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 pennisetii). 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.  
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 pennisetii). Annual. Breeding Material. Seed.

PI 537580  
origin: India.  
cultivar: ICML 15.  
pedigree: Selection from bulk germplasm from Nigeria.  
other id: IP 5082.  
other id: 700551.  
other id: GP-18.  
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 pennisetii). Annual. Breeding Material. Seed.
PI 537577 to 537581-continued


PI 537582 to 537586. Pennisetum glaucum (L.) R. Br. POACEAE Pearl millet


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 537582 to 537586-continued

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 pennisetii) 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 pennisetii) 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.
PI 537588-continued

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, adequate forage and higher latitude of
adaptation than 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 adaptation than 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.).
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.

PI 537593  **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 (Erysiphe 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.


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 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 (D1D1), 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 (D1D1), 2 recessive 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 (D1D1), 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" (did1), 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 "dilute color" (D1D1), 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 537607  donor id: 1013.  origin: United States.  other id: R5538.  

PI 537608  donor id: 1014.  origin: United States.  other id: R4093.  
rem: 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.  
rem: 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.  
rem: 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.  

PI 537612  donor id: 1018.  origin: United States.  other id: R8838.  

PI 537613  donor id: 1019.  origin: United States.  other id: R8851.  

PI 537614  donor id: 1020.  origin: United States.  other id: R8862.  


PI 537596 to 537712-continued

PI 537632  
**donor id:** 1038.  
**origin:** United States.  
**other id:** R4336-10.  

PI 537633  
**donor id:** 1039.  
**origin:** United States.  
**other id:** R4241-5.  

PI 537634  
**donor id:** 1040.  
**origin:** United States.  
**other id:** R4241-4.  

PI 537635  
**donor id:** 1041.  
**origin:** United States.  
**other id:** R4551-6.  

PI 537636  
**donor id:** 1042.  
**origin:** United States.  
**other id:** R4334-5.  

PI 537637  
**donor id:** 1043.  
**origin:** United States.  
**other id:** R4240-3.  

PI 537638  
**donor id:** 1044.  
**origin:** United States.  
**other id:** R1816.  
PI 537596 to 537712-continued

PI 537639  donor id: 1045.  origin: United States.  other id: R1829.  


PI 537642  donor id: 1048.  origin: United States.  other id: R5447.  

PI 537643  donor id: 1049.  origin: United States.  other id: R5446.  

PI 537644  donor id: 1053.  origin: United States.  other id: R9883.  

PI 537645  donor id: 1054.  origin: United States.  other id: R7665-3.  

PI 537646  donor id: 1055.  origin: United States.  other id: R62240.  

PI 537647  donor id: 1058.  origin: United States.  other id: R9246.  
PI 537648  
**donor id:** 1059.  
**origin:** United States.  
**other id:** R6259.  

PI 537649  
**donor id:** 1060.  
**origin:** United States.  
**other id:** R6291.  

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.  

PI 537653  
**donor id:** 1064.  
**origin:** United States.  
**other id:** R6349.  

PI 537654  
**donor id:** 1065.  
**origin:** United States.  
**other id:** R4114.  

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 U15.  
**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:

PI 537659  donor id: 1072.  origin: United States.  pedigree:
Selected from PI 283767.  other id: R7069-2.  remarks:

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:

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:

PI 537665  donor id: 1081.  origin: United States.  pedigree:
Selected from Royal.  other id: R7122-2.  remarks:

PI 537666  donor id: 1082.  origin: United States.  pedigree:
Selected from Royal.  other id: R7126-1.  remarks:
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 

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 (ltlt).  
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 

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 (ltlt).  
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 

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 


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 g). Oil content higher than Gila. Arizona released cultivar (stp g stp g). Cultivar. Seed.

PI 537694  donor id: 1116. origin: United States.  cultivar: ROYAL. 

PI 537695  donor id: 1117. origin: United States.  cultivar: OLE. 

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. 


PI 537699  donor id: 1121. origin: United States. pedigree: 

PI 537700  donor id: 1122. origin: United States. pedigree: 
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 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.
PI 537713-continued


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 Program, FAO, Taiz, Yemen Arab Republic. Received December 01, 1989.


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.  

PI 537722  
donor id: 1559. origin: Yemen Arab Republic. locality:  
Turba. elevation: 2000m. remarks: Race - Kafir  
caudatum. Head type 4 - semi-open, elongated, elliptical.  

PI 537723  
donor id: 1573. origin: Yemen Arab Republic. locality:  
Turba. elevation: 2000m. remarks: Race - Kafir  
caudatum. Head type 4 - semi-open, elongated, elliptical.  

PI 537724  
donor id: 1616. origin: Yemen Arab Republic. locality:  
Begel. elevation: 190m. remarks: Race - Caudatum  
kafir. Head type 4 - semi-open, elongated, elliptical.  

PI 537725  
donor id: 1640. origin: Yemen Arab Republic. locality:  
Dahana. elevation: 185m. remarks: Race - Caudatum  
durra. Head type 4 - semi-open, elongated, elliptical.  

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.  

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.  

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.  


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.


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PI 537714 to 537966-continued


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.

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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 barley 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  

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 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 100 plants.  
Rainfed subsistence. Sown November, harvested June. Used  

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  

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  
subsistence. Sown November, harvested June. Used for  

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  
subsistence. Sown November, harvested June. Used for  
PI 537968 to 537979-continued


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 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 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.


PI 538013. Carthamus tinctorius L. ASTERACEAE Safflower

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


PI 538014. Lycopersicon esculentum Miller SOLANACEAE Tomato

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


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 538018. Cucumis melo L. CUCURBITACEAE Muskmelon

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


PI 538019. Festuca arundinacea Schreber POACEAE Tall fescue

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


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

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


PI 538021. Medicago murex Willd. FABACEAE Alfalfa

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


PI 538022. Pisum sativum L. FABACEAE Pea

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


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.


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.


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 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 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 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 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 538051 to 538161-continued

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.
<table>
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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.
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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 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 538174  donor id: ORS 3267.  origin: Thailand.  collector id: HCC 47.  latitude: 18 deg. 45 min. N.  longitude: 098 deg. 50 min. E.  Seed.
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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 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.

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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 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 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 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 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 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 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 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.  

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.  

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.  
PI 538228 to 538232-continued

PI 538231 ZEA MAYS L. SUBSP. MAY IS POACEAE Corn

pedigree: A619*10(yellow dent inbred)/SD316W(white dent).

PI 538232 ZEA MAYS L. SUBSP. MAY IS POACEAE Corn

pedigree: SD33*10(yellow dent inbred)/SD316W(white dent).

PI 538233 to 538239. ZEA MAYS L. SUBSP. MAY IS POACEAE Corn


PI 538238  
origin: United States.  
cultivar: SD65.  
pedigree: A654*10(yellow dent inbred)/SD316W(white dent).  
other id: PL-148.  
group: CSR-MAIZE.  

PI 538239  
origin: United States.  
cultivar: SD69.  
pedigree: A655*10(yellow dent inbred)/SD316W(white dent).  
other id: PL-149.  
group: CSR-MAIZE.  

PI 538240 to 538244.  
Zea mays L. subsp. mays  
POACEAE  
Corn

remarks: Five Maize Germplasm Lines. Received February 16, 1990.

PI 538240  
origin: United States.  
cultivar: SD104.  
pedigree: W182B*10(yellow dent inbred)/SD316W(white dent).  
other id: GP-218.  
group: CSR-MAIZE.  

PI 538241  
origin: United States.  
cultivar: SD105.  
pedigree: W117*10(yellow dent inbred)/SD316W(white dent).  
other id: GP-219.  
group: CSR-MAIZE.  


PI 538245. Sorghum bicolor (L.) Moench POACEAE Sorghum

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: 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 environments. Annual. Cultivar. Seed.

PI 538246. Festuca arundinacea Schreber POACEAE Tall fescue


PI 538247. Festuca longifolia Thuill. POACEAE Hard fescue

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 snow 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.


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.


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.


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


PI 538253. Oryza sativa L. POACEAE Rice


PI 538254. Oryza sativa L. POACEAE Rice

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 brown. Milling yields are 65% whole kernel; 73% total milled. Moderately susceptible 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 dictyooides) 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.


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 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 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 

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 

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 

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 

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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.


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 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 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.
PI 538283-continued

**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, Lambayeque, 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:** Chilca. **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 538292  donor id: UNPRG 55.  origin: Peru.  local name: Juancho.  

PI 538293  donor id: UNPRG 58.  origin: Peru.  local name: Wendoly.  

PI 538294  donor id: UNPRG 66.  origin: Peru.  local name: Tipo 10-LM.  

PI 538295  donor id: UNPRG 69.  origin: Peru.  local name: Yuca de Calango.  

PI 538296  donor id: UNPRG 72.  origin: Peru.  local name: Tipo 34-LM.  

PI 538297  donor id: UNPRG 73.  origin: Peru.  local name: Amarillo de Chilca.  

PI 538298  donor id: UNPRG 74.  origin: Peru.  local name: Wennotz II.  

PI 538299  donor id: UNPRG 77.  origin: Peru.  local name: Zapallo de Huaura.  

PI 538300  donor id: UNPRG 78.  origin: Peru.  local name: Papino.  

PI 538301  donor id: UNPRG 80.  origin: Peru.  local name: Amarillo de Trujillo.  

PI 538302  donor id: UNPRG 82.  origin: Peru.  local name: Morado de Calango T-1.  

PI 538303  donor id: UNPRG 86.  origin: Peru.  local name: Morado de Chillon.  


PI 538306 to 538309. Ipomoea batatas (L.) Lam.  CONVOLVULACEAE  Sweet potato


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


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.

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 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 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 538319 to 538321. Amaranthus cruentus L. AMARANTHACEAE Purple amaranth


PI 538322 to 538327. Amaranthus hybrid AMARANTHACEAE


PI 538328. Indigofera hirsuta L. FABACEAE Hairy indigo

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 trials it has been similar to higher yielding than common. Annual. Cultivar. Seed.

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


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


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.


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.

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.


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 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.

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PI 538355 to 538359. Pisum sativum L. FABACEAE Pea

**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.

**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 F31e/2/CSC8615.
- **other id:** GP-79.
- **source:** Crop Sci. 30(5):1166 1990.
- **group:** CSR-PEA.

**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.
- **other id:** GP-80.
- **source:** Crop Sci. 30(5):1166 1990.
- **group:** CSR-PEA.

**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 after.
- **other id:** GP-81.
- **source:** Crop Sci. 30(5):1166 1990.
- **group:** CSR-PEA.

**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.
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 to 538374-continued

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.  
**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.  
**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.  
**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.  
**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.  
**group**: CSR-SORGHUM.  
**other id**: 88AH2012.  
**remarks**: Parental lines provide additional cytoplasmic and genetic diversity. Breeding Material. Seed.
PI 538370  

PI 538371  

PI 538372  

PI 538373  

PI 538374  
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 538388 to 538391. Glycine max (L.) Merr. FABACEAE Soybean

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 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.


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.  
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.  
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-l 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 31793.  
cultivar: TIFT #2 S-1.  
pedigree: Bulk of equal quantities of seed from 740 accessions, most of which originated in Africa.  
other id: GP-25.  
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


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.


<table>
<thead>
<tr>
<th>PI 538415 to 538522-continued</th>
</tr>
</thead>
</table>


donor id: G2424.  
origin: Iraq.  
collected: 1972.  
locality: east of Suara Tuka; 3-4 km west of Mazorka Gorge.  
elevation: 1150m.  
Annual.  
Wild.  
Seed.

donor id: G2428.  
origin: Iraq.  
collected: 1972.  
locality: east of Suara Tuka; 3-4 km west of Mazorka Gorge.  
elevation: 1150m.  
Annual.  
Wild.  
Seed.

donor id: G2429.  
origin: Iraq.  
collected: 1972.  
locality: east of Suara Tuka; 3-4 km west of Mazorka Gorge.  
elevation: 1150m.  
Annual.  
Wild.  
Seed.

donor id: G2430.  
origin: Iraq.  
collected: 1972.  
locality: east of Suara Tuka; 3-4 km west of Mazorka Gorge.  
elevation: 1150m.  
Annual.  
Wild.  
Seed.

donor id: G2432.  
origin: Iraq.  
collected: 1972.  
locality: east of Suara Tuka; 3-4 km west of Mazorka Gorge.  
elevation: 1150m.  
Annual.  
Wild.  
Seed.

donor id: G2454.  
origin: Iraq.  
collected: 1972.  
locality: between Zawita and Suara Tuka.  
Annual.  
Wild.  
Seed.

donor id: G2475.  
origin: Iraq.  
collected: 1972.  
locality: 43 km northwest of Sulaimaniya near Surdash.  
elevation: 800m.  
Annual.  
Wild.  
Seed.

donor id: G2484.  
origin: Iraq.  
collected: 1972.  
locality: 44 km northwest of Sulaimaniya.  
elevation: 700m.  
Annual.  
Wild.  
Seed.

donor id: G2495.  
origin: Iraq.  
collected: 1972.  
locality: 19 km east of Sulaimaniya towards Chuarta.  
elevation: 1050m.  
Annual.  
Wild.  
Seed.

donor id: G2496.  
origin: Iraq.  
collected: 1972.  
locality: 19 km east of Sulaimaniya towards Chuarta.  
elevation: 1050m.  
Annual.  
Wild.  
Seed.

donor id: G2497.  
origin: Iraq.  
collected: 1972.  
locality: 19 km east of Sulaimaniya towards Chuarta.  
elevation: 1050m.  
Annual.  
Wild.  
Seed.

donor id: G2532.  
origin: Iran.  
collected: 1972.  
locality: 9 km northwest of Kermanshah.  
elevation: 1400m.  
Annual.  
Wild.  
Seed.

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.


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PI 538415 to 538522-continued

locality: 14 km south of Sulaimaniya towards Qara Dagh.  

locality: 4 km northeast of Shaqlawa.  elevation: 1000m.  
Annual.  Wild.  Seed.

locality: 4 km northeast of Shaqlawa.  elevation: 1000m.  
Annual.  Wild.  Seed.

locality: 4 km northeast of Shaqlawa.  elevation: 1000m.  
Annual.  Wild.  Seed.

locality: east of Suara Tuka; ca. 3-4 km west of Mazorka  

Seed.

locality: 41 km northwest of Sulaimaniya towards Surdash.  

locality: 43 km northwest of Sulaimaniya near Surdash.  

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,  

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  

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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.


<table>
<thead>
<tr>
<th>Donor ID</th>
<th>Origin</th>
<th>Collected</th>
<th>Locality</th>
<th>Elevation</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI 538549</td>
<td>Iraq</td>
<td>1972</td>
<td>7 km northeast of Shaqlawa</td>
<td>1000 m</td>
<td>Annual. Wild. Seed.</td>
</tr>
<tr>
<td>PI 538550</td>
<td>Iraq</td>
<td>1972</td>
<td>7 km northeast of Shaqlawa</td>
<td>1000 m</td>
<td>Annual. Wild. Seed.</td>
</tr>
<tr>
<td>PI 538551</td>
<td>Iraq</td>
<td>1972</td>
<td>21 km south of Harir</td>
<td>1000 m</td>
<td>Annual. Wild. Seed.</td>
</tr>
<tr>
<td>PI 538552</td>
<td>Iraq</td>
<td>1972</td>
<td>13 km west of Shaqlawa</td>
<td>1000 m</td>
<td>Annual. Wild. Seed.</td>
</tr>
<tr>
<td>PI 538553</td>
<td>Iraq</td>
<td>1972</td>
<td>13 km west of Shaqlawa</td>
<td>1000 m</td>
<td>Annual. Wild. Seed.</td>
</tr>
<tr>
<td>PI 538554</td>
<td>Iraq</td>
<td>1972</td>
<td>13 km west of Shaqlawa</td>
<td>1000 m</td>
<td>Annual. Wild. Seed.</td>
</tr>
<tr>
<td>PI 538555</td>
<td>Iraq</td>
<td>1972</td>
<td>5.5 km north of Dohuk</td>
<td>750 m</td>
<td>Annual. Wild. Seed.</td>
</tr>
<tr>
<td>PI 538556</td>
<td>Iraq</td>
<td>1972</td>
<td>5.5 km north of Dohuk</td>
<td>750 m</td>
<td>Annual. Wild. Seed.</td>
</tr>
<tr>
<td>PI 538557</td>
<td>Iraq</td>
<td>1972</td>
<td>5.5 km north of Dohuk</td>
<td>750 m</td>
<td>Annual. Wild. Seed.</td>
</tr>
<tr>
<td>PI 538558</td>
<td>Iraq</td>
<td>1972</td>
<td>5.5 km north of Dohuk</td>
<td>750 m</td>
<td>Annual. Wild. Seed.</td>
</tr>
<tr>
<td>PI 538559</td>
<td>Iraq</td>
<td>1972</td>
<td>24 km northeast of Dohuk towards Amadiya</td>
<td>950 m</td>
<td>Annual. Wild. Seed.</td>
</tr>
<tr>
<td>PI 538560</td>
<td>Iraq</td>
<td>1972</td>
<td>24 km northeast of Dohuk towards Amadiya</td>
<td>950 m</td>
<td>Annual. Wild. Seed.</td>
</tr>
<tr>
<td>PI 538561</td>
<td>Iraq</td>
<td>1972</td>
<td>2 km west of Suara Tuka</td>
<td>1250 m</td>
<td>Annual. Wild. Seed.</td>
</tr>
</tbody>
</table>
PI 538524 to 538625-continued


<table>
<thead>
<tr>
<th>Donor ID</th>
<th>Origin</th>
<th>Collection Year</th>
<th>Locality</th>
<th>Elevation</th>
<th>Growth Form</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>G2488</td>
<td>Iraq</td>
<td>1972</td>
<td>25 km northwest of Sulaimaniya on road to Dokhar</td>
<td>800m</td>
<td>Annual, Wild</td>
<td>Seed</td>
</tr>
<tr>
<td>G2514</td>
<td>Iran</td>
<td>1972</td>
<td>5.5 km north of Bisotun</td>
<td>1350m</td>
<td>Annual</td>
<td>Wild, Seed</td>
</tr>
<tr>
<td>G2515</td>
<td>Iran</td>
<td>1972</td>
<td>5.5 km north of Bisotun</td>
<td>1350m</td>
<td>Annual</td>
<td>Wild, Seed</td>
</tr>
<tr>
<td>G2539</td>
<td>Iran</td>
<td>1972</td>
<td>47 km northwest of Shahabad</td>
<td>1500m</td>
<td>Annual</td>
<td>Wild, Seed</td>
</tr>
<tr>
<td>G2588</td>
<td>Iraq</td>
<td>1972</td>
<td>1 km northeast of Salahadin</td>
<td>1100m</td>
<td>Annual</td>
<td>Wild, Seed</td>
</tr>
<tr>
<td>G2590</td>
<td>Iraq</td>
<td>1972</td>
<td>1 km northeast of Salahadin</td>
<td>1100m</td>
<td>Annual</td>
<td>Wild, Seed</td>
</tr>
<tr>
<td>G2595</td>
<td>Iraq</td>
<td>1972</td>
<td>1 km northeast of Salahadin</td>
<td>1100m</td>
<td>Annual</td>
<td>Wild, Seed</td>
</tr>
<tr>
<td>G2600</td>
<td>Iraq</td>
<td>1972</td>
<td>1 km northeast of Salahadin</td>
<td>1100m</td>
<td>Annual</td>
<td>Wild, Seed</td>
</tr>
<tr>
<td>G2623</td>
<td>Iraq</td>
<td>1972</td>
<td>2 km northwest of Salahadin</td>
<td>1100m</td>
<td>Annual</td>
<td>Wild, Seed</td>
</tr>
<tr>
<td>G2653</td>
<td>Iraq</td>
<td>1972</td>
<td>4 km northeast of Shaqlawa</td>
<td>1000m</td>
<td>Annual</td>
<td>Wild, Seed</td>
</tr>
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<td>G2668</td>
<td>Iraq</td>
<td>1972</td>
<td>7 km northeast of Shaqlawa</td>
<td>1000m</td>
<td>Annual</td>
<td>Wild, Seed</td>
</tr>
<tr>
<td>G2681</td>
<td>Iraq</td>
<td>1972</td>
<td>21 km south of Harir</td>
<td>1000m</td>
<td>Annual</td>
<td>Wild, Seed</td>
</tr>
<tr>
<td>G2690</td>
<td>Iraq</td>
<td>1972</td>
<td>21 km south of Harir</td>
<td>1000m</td>
<td>Annual</td>
<td>Wild, Seed</td>
</tr>
</tbody>
</table>


271
locality: 1 km northeast of Salahadin.  elevation: 1100m.  
Annual.  Wild.  Seed.

locality: 7 km northeast of Shaqlawa.  elevation: 1000m.  
Annual.  Wild.  Seed.

locality: 13 km west of Shaqlawa.  elevation: 1000m.  
Annual.  Wild.  Seed.

locality: 13 km west of Shaqlawa.  elevation: 1000m.  
Annual.  Wild.  Seed.

locality: 6 km east of Suara Tuka.  elevation: 1050m.  
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 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.


273
                   locality: 36.2 km west of Diyarbakir in the Karacadag.

                   locality: 36.2 km west of Diyarbakir in the Karacadag.

                   locality: 36.2 km west of Diyarbakir in the Karacadag.

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                   locality: 36.2 km west of Diyarbakir in the Karacadag.

                   locality: 36.2 km west of Diyarbakir in the Karacadag.

                   locality: 36.2 km west of Diyarbakir in the Karacadag.
locality: 44 km west of Diyarbakir in the Karacadag. 

locality: 44 km west of Diyarbakir in the Karacadag. 

locality: 44 km west of Diyarbakir in the Karacadag. 

locality: 44 km west of Diyarbakir in the Karacadag. 

locality: 44 km west of Diyarbakir in the Karacadag. 

locality: 52.6 km west of Diyarbakir in the Karacadag. 

locality: 51 km west of Diyarbakir in the Karacadag. 

locality: 51 km west of Diyarbakir in the Karacadag. 

locality: 52.5 km west of Diyarbakir in the Karacadag. 

locality: 52.5 km west of Diyarbakir in the Karacadag. 

locality: 52.5 km west of Diyarbakir in the Karacadag. 

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 538626 to 538719-continued


PI 538626 to 538719-continued


locality: between Ramla and Jericho, ca. 6 km east of Taibe.  Annual.  Wild.  Seed.


PI 538626 to 538719-continued


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 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 to 538751-continued


PI 538724 to 538751-continued

locality: ca. 10 km west of Baal Bek.  elevation: 1000m.  
Annual.  Wild.  Seed.

locality: ca. 10 km west of Baal Bek.  elevation: 1000m.  
Annual.  Wild.  Seed.

locality: ca. 10 km west of Baal Bek.  elevation: 1000m.  
Annual.  Wild.  Seed.

locality: ca. 10 km west of Baal Bek.  elevation: 1000m.  
Annual.  Wild.  Seed.

locality: ca. 10 km west of Baal Bek.  elevation: 1000m.  
Annual.  Wild.  Seed.

locality: ca. 10 km west of Baal Bek.  elevation: 1000m.  
Annual.  Wild.  Seed.

locality: ca. 10 km west of Baal Bek.  elevation: 1000m.  
Annual.  Wild.  Seed.

PI 538746  donor id: G3243.  origin: Lebanon.  locality: Talia.  

PI 538747  donor id: G3245.  origin: Lebanon.  locality: Talia.  

PI 538748  donor id: G3257.  origin: Lebanon.  locality: Kfardane.  

PI 538749  donor id: G3260.  origin: Lebanon.  locality: Iaat.  

PI 538750  donor id: G3266.  origin: Lebanon.  locality: Iaat.  

PI 538751  donor id: G3268.  origin: Lebanon.  locality: Iaat.  

PI 538752.  Sorghum sp.  POACEAE

  Donated by: Osman, A., Dept. of Crop Production, Faculty of  
  Agriculture, Sudan.  Received February 17, 1976.

282
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 538755 donor id: Hyb.-16. origin: India. pedigree: Selection no. 6 from PI 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 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

PI 538758 to 538759-continued


PI 538760. Hordeum vulgare L. POACEAE Barley


PI 538761. Hordeum vulgare L. POACEAE Barley

PI 538761-continued


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.


PI 538763. X Pseudoroetrigia sp. POACEAE


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 (Elytrigia 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.


PI 538765. Brassica oleracea var. botrytis L. BRASSICACEAE Cauliflower

Donated by: Nickerson-Zwaan b.v., United States. Received March 21, 1990.


PI 538766 to 538767. Brassica napus L. BRASSICACEAE Rape

Donated by: Svalof AB, United States. Received March 21, 1990.


PI 538768. Triticum aestivum L. POACEAE Wheat


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 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

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


**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 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.


PI 538786 to 538787. Allium sp. LILIACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.


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

**Donated by:** Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.
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

**Donated by:** Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.
PI 538796-continued


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.


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 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.

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.


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.


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  

PI 538804  

PI 538805. Beckmannia 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 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

**Donated by:** Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

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:** Biiskij 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.


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<th>origin institute</th>
<th>origin institute id</th>
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<td>538829</td>
<td>AJC111</td>
<td>USSR</td>
<td>VIR</td>
<td>VIR 36202</td>
<td>1986</td>
<td>AJC111</td>
<td>Local Perm. Wild. Seed.</td>
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<tr>
<td>538830</td>
<td>AJC112</td>
<td>USSR</td>
<td>VIR</td>
<td>VIR 45200</td>
<td>1987</td>
<td>AJC112</td>
<td>Habarovskij Habarovsk Territory. Wild. Seed.</td>
</tr>
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</table>


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.


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<tr>
<th>PI</th>
<th>Donor ID</th>
<th>Origin</th>
<th>Origin Institute</th>
<th>Cultivar</th>
<th>Collection Date</th>
<th>Collector ID</th>
<th>Other ID</th>
<th>Locality</th>
<th>Type</th>
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<tr>
<td>538842</td>
<td>AJC124</td>
<td>USSR</td>
<td>VIR</td>
<td>CHEMEROVKA 3</td>
<td>January 20, 1989</td>
<td>AJC124</td>
<td>104</td>
<td>K-285</td>
<td>Cultivar. Seed</td>
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<td>538844</td>
<td>AJC126</td>
<td>USSR</td>
<td>VIR</td>
<td>POTERYAESKY</td>
<td>January 20, 1989</td>
<td>AJC126</td>
<td>106</td>
<td>K-144</td>
<td>Cultivar. Seed</td>
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<td>538845</td>
<td>AJC127</td>
<td>USSR</td>
<td>VIR</td>
<td>MALINOVKA 2</td>
<td>January 20, 1989</td>
<td>AJC127</td>
<td>107</td>
<td>K-439</td>
<td>Cultivar. Seed</td>
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<td>538847</td>
<td>AJC129</td>
<td>USSR</td>
<td>VIR</td>
<td>DOSKOY 43</td>
<td>January 20, 1989</td>
<td>AJC129</td>
<td>109</td>
<td>K-439</td>
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<td>538848</td>
<td>AJC130</td>
<td>USSR</td>
<td>VIR</td>
<td>ELO 20</td>
<td>January 20, 1989</td>
<td>AJC130</td>
<td>110</td>
<td>K-283</td>
<td>Cultivar. Seed</td>
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<td>538849</td>
<td>AJC131</td>
<td>USSR</td>
<td>VIR</td>
<td>ELO 9</td>
<td>January 20, 1989</td>
<td>AJC131</td>
<td>111</td>
<td>K-149</td>
<td>Cultivar. Seed</td>
</tr>
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</table>


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 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 to 538878-continued


PI 538879 to 538881.  Calamagrostis epigeios (L.) Roth  POACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States.  Received February 05, 1990.


PI 538882 to 538885.  Calamagrostis 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 538882 to 538885-continued


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.


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.


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.

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.


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  

PI 538891  

PI 538892  

PI 538893  

PI 538894  

PI 538895  

PI 538896  


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<th>Donor ID</th>
<th>Origin</th>
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<td>PI 538907</td>
<td>USSR</td>
<td>Institute of Cytology &amp; Genetics, Siberian Branch of Academy of Science, Novosibirsk</td>
<td>AJC194</td>
<td>339</td>
<td>Experimental farm, Cherga</td>
<td>Cultivated. Seed.</td>
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<tr>
<td>PI 538908</td>
<td>USSR</td>
<td>Institute of Cytology &amp; Genetics, Siberian Branch of Academy of Science, Novosibirsk</td>
<td>AJC195</td>
<td>340</td>
<td>Experimental farm, Cherga</td>
<td>Cultivated. Seed.</td>
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<tr>
<td>PI 538909</td>
<td>USSR</td>
<td>Institute of Cytology &amp; Genetics, Siberian Branch of Academy of Science, Novosibirsk</td>
<td>AJC196</td>
<td>349</td>
<td>Birch understory, near Bersdsk, Siberia, Novosibirsk region</td>
<td>Wild. Seed.</td>
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<tr>
<td>PI 538910</td>
<td>USSR</td>
<td></td>
<td>AJC197</td>
<td>350</td>
<td>Heavily grazed meadow, 5km E Yubagon Pass, Altai region</td>
<td>Wild. Seed.</td>
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<tr>
<td>PI 538911</td>
<td>USSR</td>
<td></td>
<td>AJC198</td>
<td>356</td>
<td>Wooded area with birch and Pinus, Katun River, Yust Sema, Altai Mountains</td>
<td>elevation: 914m. remarks: One plant sampled. Wild. Seed.</td>
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<tr>
<td>PI 538912</td>
<td>USSR</td>
<td></td>
<td>AJC201</td>
<td>384</td>
<td>Kamlak, Altai Mountains, Siberia</td>
<td>Wild. Seed.</td>
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<tr>
<td>PI 538913</td>
<td>USSR</td>
<td></td>
<td>AJC202</td>
<td>387</td>
<td>Mixed grass/forb meadow, valley bottom, 5km S of Cherga, Altai Mountains, Siberia</td>
<td>elevation: 724m. Wild. Seed.</td>
</tr>
<tr>
<td>PI 538914</td>
<td>USSR</td>
<td></td>
<td>AJC203</td>
<td>388</td>
<td>Heavily grazed, along river bottom, outskirts of Gorno-Altysk, Altai region, Siberia</td>
<td>elevation: 472m. Wild. Seed.</td>
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<tr>
<td>PI 538915</td>
<td>USSR</td>
<td></td>
<td>AJC204</td>
<td>417</td>
<td>Rocky hillside, 2km W Yubagon Pass, Altai region.</td>
<td>elevation: 1524m. Wild. Seed.</td>
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<tr>
<td>PI 538916</td>
<td>USSR</td>
<td></td>
<td>AJC205</td>
<td>440</td>
<td></td>
<td>Diploid. Wild. Seed.</td>
</tr>
</tbody>
</table>


PI 538920.  Dactylis glomerata L. subsp. glomerata  POACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.


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.


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.

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 538931. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.
PI 538931-continued


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 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 538958

PI 538959 to 538960. Festuca rubra 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 538959

PI 538960

PI 538961 to 538965. Festuca rupicola Heuffel POACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

PI 538961

PI 538962

PI 538963


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.


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.


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 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 538976. Lolium perenne L. POACEAE Ryegrass

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.
PI 538976-continued


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 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 538981 to 538997. Medicago sativa subsp. falcata (L.) Arcang. FABACEAE Sickle alfalfa

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.


PI 538998. Medicago hybrida (Pourret) Trautv.  FABACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.
PI 538998-continued


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.


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.


PI 539001 to 539003. Medicago sativa L. FABACEAE Alfalfa

 Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

PI 539001


PI 539002

PI 5390001 to 539003-continued

PI 539003  
donor id: AJC454.  
origin: USSR.  
origin institute: VIR,  
44 Herzen Street, Leningrad.  
origin institute id: VIR  
35643.  
collector id: AJC454.  
locality: L. Krasnovadopadskaja 8 Kazakh.  
Wild.  
Seed.

PI 539004 to 539007.  
Medicago sativa nsubsp. varia (Martyn) Arcang.  
FABACEAE

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

PI 539004  
donor id: AJC455.  
origin: USSR.  
origin institute: VIR,  
44 Herzen Street, Leningrad.  
origin institute id: VIR  
35731.  
collector id: AJC455.  
locality: Dikorastuscaja Stavropol Territory.  
received as: Medicago hemicylca.  
Wild.  
Seed.

PI 539005  
donor id: AJC457.  
origin: USSR.  
origin institute: VIR,  
44 Herzen Street, Leningrad.  
origin institute id: VIR  
37219.  
collector id: AJC457.  
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.  
collector id: AJC459.  
received as: Medicago trautvetteri.  
Wild.  
Seed.

PI 539007  
donor id: AJC460.  
origin: USSR.  
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.  
collector id: AJC456.  
locality: Dikorastuscaja Turkmen.  
received as: Medicago sinscaja.  
Wild.  
Seed.

PI 539010 to 539016. Melilotus albus Medikus  FABACEAE  White 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 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 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 to 539025-continued


PI 539026 to 539027. Onobrychis 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 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.


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 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

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

donor id: AJC483.  
origin: USSR.  
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.  
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

Donated by: Asay, K.H., Forage and Range Research, Utah State University, USDA-ARS, Logan, Utah, United States. Received February 05, 1990.

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.  
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.  
collector id: AJC487.  
other id: 260.  
locality: 2km NW of Kamlak, Altai Mountains, Siberia.  
elevation: 669m.  
Wild.  
Seed.
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<td>539036</td>
<td>AJC488</td>
<td>USSR</td>
<td>August 14,</td>
<td>AJC488</td>
<td>265</td>
<td>Hillside, 1.6km from Cherga, Altai region.</td>
<td>Wild. Seed.</td>
<td>539037</td>
<td>AJC489</td>
<td>USSR</td>
<td>August 18,</td>
<td>AJC489</td>
<td>269</td>
<td>Along river bottom, 4km N of Gorno-Altysk, Altai Mountains, Siberia.</td>
<td>472m. Wild. Seed.</td>
<td>539038</td>
<td>AJC490</td>
<td>USSR</td>
<td>August 16,</td>
<td>AJC490</td>
<td>365</td>
<td>5km W of Yubagon Village, Altai Mountains, Siberia.</td>
<td>1372m. Wild. Seed.</td>
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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.  
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.  
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.  
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.  
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.  
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.  
collector id: AJC517.  
other id: 306.  
locality: Ungrazed, near road, alpine meadow of mixed grass/forbs, Topuchee, Altai Mountains, Siberia.  
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.

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.


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 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.


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 to 539075-continued


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 539076 to 539081-continued


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.


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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 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 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 to 539101-continued


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.


PI 539103.  Hordeum vulgare L.  POACEAE  Barley


PI 539104.  Hordeum vulgare L.  POACEAE  Barley


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. Kernels 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 conditions. 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.

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.


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.


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


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.


PI 539113. Hordeum vulgare L. POACEAE Barley

Donated by: Parker, J.H., Kansas State University, Manhattan, Kansas, United States. Received January 30, 1990.


PI 539114. Hordeum vulgare L. POACEAE Barley


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 Composite 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.,
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

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


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.


PI 539122. Hordeum vulgare L. POACEAE Barley


PI 539123. Hordeum vulgare L. POACEAE Barley


PI 539124. Hordeum vulgare L. POACEAE Barley


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-dense, 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
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:
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).

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

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 conditions. 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
Cultivar. Seed.
PI 539130. Hordeum vulgare L. POACEAE Barley

**Donated by:** Eslick, R.F., Montana Agric. Exp. Sta., Bozeman, 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


**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, C1ho 6625. **other id:** C1ho 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 of 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 C1ho 7404 from Korea. **other id:** C1ho 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 (C1ho 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


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.


PI 539137. Hordeum vulgare L. POACEAE Barley


PI 539138. Hordeum vulgare L. POACEAE Barley

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


origin: United States. cultivar: KANBY. pedigree:

PI 539140. Hordeum vulgare L. POACEAE Barley

PI 539140-continued

origin: United States. cultivar: HERB. pedigree:

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.


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

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
PI 539145  Atalantia citroides Pierre ex Guillaumin RUTACEAE Citrus relative

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

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

PI 539150  Citrus asahikan hort. ex T. Tanaka RUTACEAE Pummelo hybrid

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 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.  

PI 539160  Citrus aurantium L.  **RUTACEAE** Bittersweet orange
donor id: CRC 2541.  origin: UNKNOWN.  **cultivar:** Dummett. 

PI 539161  Citrus aurantium L.  **RUTACEAE** Sour orange

PI 539162  Citrus aurantium L.  **RUTACEAE** Sour orange

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

PI 539165  Citrus aurantium L.  **RUTACEAE** Sour orange

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 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  

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  
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:  

PI 539172  
Citrus aurantium L.  RUTACEAE Sour orange  
donor id: CRC 3981.  origin: UNKNOWN.  cultivar:  

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  
Cutting.
PI 539142 to 539855-continued

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

PI 539177 Citrus aurantium L. RUTACEAE Sour orange hybrid

PI 539178 Citrus benikoji hort. ex T. Tanaka RUTACEAE Tangor

PI 539179 Citrus bergamia Risso & Poit. RUTACEAE Sour orange hybrid

PI 539180 Citrus bergamia Risso & Poit. RUTACEAE Sour orange hybrid
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

PI 539183 Citrus clementina hort. ex T. Tanaka RUTACEAE Mandarin

PI 539184 Citrus clementina hort. ex T. Tanaka RUTACEAE Mandarin

PI 539185 Citrus clementina hort. ex T. Tanaka RUTACEAE Mandarin

PI 539186 Citrus clementina hort. ex T. Tanaka RUTACEAE Mandarin

PI 539187 Citrus davaoensis (Wester) T. Tanaka RUTACEAE Lime

PI 539188 Citrus deliciosa Ten. RUTACEAE Mandarin
PI 539189  Citrus depressa Hayata  RUTACEAE Mandarin

PI 539190  Citrus erythrosa hort. ex T. Tanaka  RUTACEAE Mandarin

PI 539191  Citrus erythrosa hort. ex T. Tanaka  RUTACEAE Mandarin

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-citranger stunt. Tree. Cutting.

PI 539193  Citrus excelsa Wester  RUTACEAE Lime

PI 539194  Citrus excelsa Wester  RUTACEAE Lime

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

PI 539199 Citrus hassaku hort. ex T. Tanaka RUTACEAE Pummelo hybrid

PI 539200 Citrus hiroshimana hort. ex Yuich. Tanaka RUTACEAE Grapefruit

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
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  
pedigree: C. aurantiifolia 'Mexican' x C. limon 'Genoa'.  

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  
anappearance like thick-rinded lemon; sour, lemon-like  
flavor; seedy.  Tree.  Cutting.
PI 539209  Citrus hybrid RUTACEAE Lemon hybrid  

PI 539210  Citrus hybrid RUTACEAE Lemon hybrid  

PI 539211  Citrus hybrid RUTACEAE Lemon hybrid  

PI 539212  Citrus hybrid RUTACEAE Lime  

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  

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  
PI 539217 Citrus hybrid RUTACEAE Papeda hybrid
donor id: CRC 3612. origin: UNKNOWN. cultivar: Kulobot.

PI 539218 Citrus hybrid RUTACEAE Pummelo hybrid

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

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

PI 539223 Citrus hybrid RUTACEAE Pummelo hybrid
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

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. sinensis 'Hamlin') x C. myrtifolia Fl.

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,

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,

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,

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,
PI 539232 Citrus hybrid RUTACEAE Sour orange hybrid

PI 539233 Citrus hybrid RUTACEAE Sour orange hybrid

PI 539234 Citrus hybrid RUTACEAE Sour orange hybrid

PI 539235 Citrus hybrid RUTACEAE Sour orange hybrid

PI 539236 Citrus hybrid RUTACEAE Sour orange hybrid

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:

PI 539240  Citrus hybrid RUTACEAE Tangor
donor id: CRC 3018. origin: UNKNOWN. cultivar: Dweet.

PI 539241  Citrus hybrid RUTACEAE Tangor

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

PI 539244  Citrus hybrid RUTACEAE Tangor

PI 539245  Citrus hybrid RUTACEAE Tangor
donor id: CRC 3875. origin: UNKNOWN. cultivar: Tankan.
PI 539246  Citrus hybrid  RUTACEAE Tangor  

PI 539247  Citrus hybrid  RUTACEAE Tangor  

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  

PI 539251  Citrus ichangensis Swingle  RUTACEAE Papeda  

PI 539252  Citrus ichangensis Swingle  RUTACEAE Papeda  

PI 539253  Citrus ichangensis Swingle  RUTACEAE Papeda  
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  


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  
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:  

PI 539263  Citrus jambhiri Lush.  RUTACEAE Rough lemon  
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  

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  
local name:  Schaub rough lemon.  remarks:  Typical rough  

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
pedigree: Open pollinated seedling. remarks: Typical

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
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
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
Cultivar. Cutting.

PI 539273  Citrus latifolia (Yuich. Tanaka) T. Tanaka RUTACEAE Lime
local name: Tahiti lime. remarks: Exocortis removed by
shoot tip grafting 1985. Fruit seems identical to CRC

PI 539274  Citrus latifolia (Yuich. Tanaka) T. Tanaka RUTACEAE Lime
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

PI 539276 Citrus leiocarpa hort. ex T. Tanaka RUTACEAE Mandarin

PI 539277 Citrus limetta Risso RUTACEAE Sweet lemon

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

PI 539281 Citrus limetta Risso RUTACEAE Sweet lemon
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,

PI 539283  Citrus limettioides T. Tanaka  RUTACEAE Sweet lime
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
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,

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

PI 539288  Citrus limon (L.) Burm. f.  RUTACEAE Lemon
donor id:  CRC 2477.  origin:  UNKNOWN.  cultivar:
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,

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:

PI 539292 Citrus limon (L.) Burm. f. RUTACEAE Lemon
donor id: CRC 280. origin: UNKNOWN. cultivar:
Villafranca. remarks: Exocortis removed by shoot tip
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. Seedy.

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

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
  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
  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
  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;

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
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  

PI 539305  Citrus limon (L.) Burm. f. RUTACEAE Lemon
            donor id: CRC 3501. origin: UNKNOWN. cultivar:  
            Limoneira Olivelands 8-A. local name: Limoneira  

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
            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  

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  

PI 539310  Citrus limon (L.) Burm. f. RUTACEAE Lemon
            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  

PI 539312 Citrus limon (L.) Burm. f. RUTACEAE Lemon  

PI 539313 Citrus limon (L.) Burm. f. RUTACEAE Lemon  

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  

PI 539316 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Eureka  

PI 539317 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Eureka  

PI 539318 Citrus limon (L.) Burm. f. RUTACEAE Lemon-Eureka  
PI 539319  Citrus limon (L.) Burm. f.  RUTACEAE Lemon-Eureka

PI 539320  Citrus limon (L.) Burm. f.  RUTACEAE Lemon-Eureka

PI 539321  Citrus limon (L.) Burm. f.  RUTACEAE Lemon-Eureka

PI 539322  Citrus limon (L.) Burm. f.  RUTACEAE Lemon-Eureka

PI 539323  Citrus limon (L.) Burm. f.  RUTACEAE Lemon-Eureka

PI 539324  Citrus limon (L.) Burm. f.  RUTACEAE Lemon-Eureka

PI 539325  Citrus limon (L.) Burm. f.  RUTACEAE Lemon-Eureka

PI 539326  Citrus limon (L.) Burm. f.  RUTACEAE Lemon-Lisbon
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. **local name:** Foothill Lisbon lemon. 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
PI 539344 Citrus limonia Osbeck RUTACEAE Mandarin hybrid-Rangpur  
donor id: CRC 3932. origin: UNKNOWN. received as: Citrus limonia var. hangeson. Tree. Seed.

PI 539345 Citrus limonia Osbeck RUTACEAE Mandarin hybrid-Rangpur  

PI 539346 Citrus longispina Wester RUTACEAE Lime  

PI 539347 Citrus lycopersiciformis (Lush.) hort. ex T. Tanaka RUTACEAE Mandarin  

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  

PI 539350 Citrus madurensis Lour. RUTACEAE Calamondin  
PI 539351 Citrus madurensis Lour. RUTACEAE Calamondin

PI 539352 Citrus maxima (Burman) Merr. RUTACEAE Pummelo

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

PI 539355 Citrus maxima (Burman) Merr. RUTACEAE Pummelo

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

PI 539358 Citrus maxima (Burman) Merr. RUTACEAE Pummelo
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

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

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,

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
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
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
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.

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  

PI 539376  Citrus maxima (Burman) Merr. RUTACEAE Pummelo  

PI 539377  Citrus maxima (Burman) Merr. RUTACEAE Pummelo  

PI 539378  Citrus maxima (Burman) Merr. RUTACEAE Pummelo  

PI 539379  Citrus maxima (Burman) Merr. RUTACEAE Pummelo  

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  

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  
PI 539384  Citrus maxima (Burman) Merr.  RUTACEAE Pummelo
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
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

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

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

PI 539394 Citrus maxima (Burman) Merr. RUTACEAE Pummelo

PI 539395 Citrus maxima (Burman) Merr. RUTACEAE Pummelo

PI 539396 Citrus maxima (Burman) Merr. RUTACEAE Pummelo

PI 539397 Citrus maxima (Burman) Merr. RUTACEAE Pummelo
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

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

PI 539401 Citrus maxima (Burman) Merr. RUTACEAE Pummelo
donor id: CRC 3949. origin: UNKNOWN. cultivar: Pauthel.
local name: Pauthel pummelo. remarks: Thermotherapy

PI 539402 Citrus maxima (Burman) Merr. RUTACEAE Pummelo
local name: Banokan pummelo. remarks: Tristeza and
exocortis removed by thermotherapy and shoot tip
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
Cutting.

PI 539405 Citrus maxima (Burman) Merr. RUTACEAE Pummelo
donor id: CRC 3961. origin: UNKNOWN. cultivar:
Banpeiyu. local name: Pai You, Taiwan pummelo. remarks:
Cutting.
PI 539406  Citrus maxima (Burman) Merr. RUTACEAE Pummelo
  donor id: CRC 3978. origin: UNKNOWN. cultivar: Kinokawa

PI 539407  Citrus maxima (Burman) Merr. RUTACEAE Pummelo
  donor id: CRC 448. origin: UNKNOWN. cultivar: Moanalua.
  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

PI 539408  Citrus maxima (Burman) Merr. RUTACEAE Pummelo
  donor id: CRC 578. origin: UNKNOWN. cultivar: Fleming's
  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

PI 539409  Citrus maxima (Burman) Merr. RUTACEAE Pummelo
  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

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

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
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

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

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 Commerce is 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, Cedro Liscio.  **remarks:** See The Citrus Industry, Vol 1, pp 554-555. 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 554-555. 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.

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PI 539426  Citrus medica L.  RUTACEAE Citron

PI 539427  Citrus medica L.  RUTACEAE Citron

PI 539428  Citrus medica L.  RUTACEAE Citron

PI 539429  Citrus medica L.  RUTACEAE Citron

PI 539430  Citrus medica L.  RUTACEAE Citron

PI 539431  Citrus medica L.  RUTACEAE Citron

PI 539432  Citrus medica L.  RUTACEAE Citron
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

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.  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.  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.  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.
Citrus medica L. RUTACEAE Citron

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.

Citrus medica L. RUTACEAE Citron

Citrus medica L. RUTACEAE Citron

Citrus medica L. RUTACEAE Citron

Citrus medica L. RUTACEAE Citron hybrid

Citrus medica var. sarcodactylis (Nooten) Swingle RUTACEAE Citron
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  
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  Papaya 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  
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  

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. Tanaka, 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,  

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  

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,  

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  

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,  

PI 539462  Citrus paradisi Macfad.  RUTACEAE  
Grapefruit  
donor id: CRC 2010.  origin: UNKNOWN.  cultivar: Marsh  
Pink.  remarks: Exocortis removed by shoot tip grafting  

PI 539463  Citrus paradisi Macfad.  RUTACEAE  
Grapefruit  
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  
pedigree: Cudebeck strain.  local name: New Zealand.  
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

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

PI 539468 Citrus paradisi Macfad. RUTACEAE Grapefruit
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
remarks: Hybrid-orrange 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
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

PI 539474 Citrus paradisi Macfad. RUTACEAE Grapefruit

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

PI 539477 Citrus paradisi Macfad. RUTACEAE Grapefruit

PI 539478 Citrus paradisi Macfad. RUTACEAE Grapefruit
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
 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

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
 Cutting.

PI 539485  Citrus paradisi Macfad. RUTACEAE Grapefruit
 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

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

PI 539489 Citrus paradisi Macfad. RUTACEAE Grapefruit hybrid
donor id: CRC 3909. origin: UNKNOWN. cultivar:

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

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  

PI 539496  
*Citrus reticulata* Blanco  RUTACEAE Mandarin  

PI 539497  
*Citrus reticulata* Blanco  RUTACEAE Mandarin  

PI 539498  
*Citrus reticulata* Blanco  RUTACEAE Mandarin  

PI 539499  
*Citrus reticulata* Blanco  RUTACEAE Mandarin  

PI 539500  
*Citrus reticulata* Blanco  RUTACEAE Mandarin  

PI 539501  
*Citrus reticulata* Blanco  RUTACEAE Mandarin  

PI 539502  
*Citrus reticulata* Blanco  RUTACEAE Mandarin  

PI 539503  
*Citrus reticulata* Blanco  RUTACEAE Mandarin  
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  

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  

PI 539508  Citrus reticulata Blanco  RUTACEAE Mandarin  

PI 539509  Citrus reticulata Blanco  RUTACEAE Mandarin  

PI 539510  Citrus reticulata Blanco  RUTACEAE Mandarin  
PI 539511 Citrus reticulata Blanco RUTACEAE Mandarin
donor id: CRC 3569. origin: UNKNOWN. cultivar: Encore.

PI 539512 Citrus reticulata Blanco RUTACEAE Mandarin

PI 539513 Citrus reticulata Blanco RUTACEAE Mandarin

PI 539514 Citrus reticulata Blanco RUTACEAE Mandarin

PI 539515 Citrus reticulata Blanco RUTACEAE Mandarin

PI 539516 Citrus reticulata Blanco RUTACEAE Mandarin

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

PI 539521  Citrus reticulata Blanco  RUTACEAE  Mandarin

PI 539522  Citrus reticulata Blanco  RUTACEAE  Mandarin

PI 539523  Citrus reticulata Blanco  RUTACEAE  Mandarin

PI 539524  Citrus reticulata Blanco  RUTACEAE  Mandarin
PI 539525  Citrus reticulata Blanco  RUTACEAE Mandarin
pedigree:  C. clementina x C. x tangelo 'Orlando'.  local
name:  Lee mandarin.  remarks:  See The Citrus Industry,

PI 539526  Citrus reticulata Blanco  RUTACEAE Mandarin
donor id:  CRC 3852.  origin:  UNKNOWN.  cultivar:  Som Kao
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

PI 539527  Citrus reticulata Blanco  RUTACEAE Mandarin
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

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

PI 539532  Citrus reticulata Blanco  RUTACEAE Mandarin
donor id:  CRC 3913.  origin:  UNKNOWN.  pedigree:  o.p. of

PI 539533  Citrus reticulata Blanco  RUTACEAE Mandarin
donor id:  CRC 3953.  origin:  UNKNOWN.  cultivar:  W.

PI 539534  Citrus reticulata Blanco  RUTACEAE Mandarin
donor id:  CRC 3956.  origin:  UNKNOWN.  pedigree:  C.
reticulata 'Novelty' x C. reticulata 'Ellendale'.
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?.

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

PI 539542 Citrus reticulata Blanco RUTACEAE Mandarin
donor id: CRC 3991. origin: UNKNOWN. pedigree: C. reticulata 'Lee' x C. reticulata 'Nova'.

PI 539543 Citrus reticulata Blanco RUTACEAE Mandarin
donor id: CRC 3992. origin: UNKNOWN. pedigree: C. reticulata 'Robinson' x C. reticulata 'Lee'.

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  

PI 539548  Citrus sinensis (L.) Osbeck  RUTACEAE Blood orange  

PI 539549  Citrus sinensis (L.) Osbeck  RUTACEAE Blood orange  

PI 539550  Citrus sinensis (L.) Osbeck  RUTACEAE Blood orange  
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,  
   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,  
   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 Amelioreee.  
   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

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
  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

PI 539563  Citrus sinensis (L.) Osbeck  RUTACEAE Navel orange
  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
  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,

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
PI 539566  Citrus sinensis (L.) Osbeck  RUTACEAE  Navel orange
donor id: CRC 3033.  origin: UNKNOWN.  cultivar: Frost
Tree.  Cultivar.

PI 539567  Citrus sinensis (L.) Osbeck  RUTACEAE  Navel orange

PI 539568  Citrus sinensis (L.) Osbeck  RUTACEAE  Navel orange
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
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
pedigree: Open pollinated seedling.  local name:
Summernavel.  remarks: Described in The Citrus Industry,

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 539142 to 539855-continued

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.  
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.  
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.  **local name:** Washington navel.  **pedigree:** Open pollinated seedling.  **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
  pedigree: Open pollinated seedling. local name: Oroville Sweet.
  Typical seedy, mid-season sweet orange. Tree. Cultivar.
  Cutting.

PI 539590 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange
  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
  pedigree: Open pollinated seedling. remarks:
  Typical mid-season, seedy sweet orange. This and CRC 292

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

PI 539595 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange
  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,  

PI 539598  Citrus sinensis (L.) Osbeck  RUTACEAE  Sweet orange  

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  

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  
remarks:  Psorosis and exocortis removed by  
thermotherapy and shoot tip grafting 1985.  Tree.  
Cultivar.  Cutting.

PI 539602  Citrus sinensis (L.) Osbeck  RUTACEAE  Sweet orange  
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  

PI 539604  Citrus sinensis (L.) Osbeck  RUTACEAE  Sweet orange  

PI 539605  Citrus sinensis (L.) Osbeck  RUTACEAE  Sweet orange  

PI 539606  Citrus sinensis (L.) Osbeck  RUTACEAE  Sweet orange  

PI 539607  Citrus sinensis (L.) Osbeck  RUTACEAE  Sweet orange  

PI 539608  Citrus sinensis (L.) Osbeck  RUTACEAE  Sweet orange  

PI 539609  Citrus sinensis (L.) Osbeck  RUTACEAE  Sweet orange  
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 

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 

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 

PI 539615  Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange  
remarks: Exocortis and seedling yellows removed by shoot 
tip grafting 1985. Compact tree; fairly large orange; 
rough, poorly colored rind; seedy; good flavor; 

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 539142 to 539855-continued

PI 539617 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange

PI 539618 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange

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

PI 539621 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange

PI 539622 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange

PI 539623 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange
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

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
pedigree: Open pollinated seedling.  local name: Olivelands sweet orange.  remarks: Nice flavor;
much fruit on ground 3/87; typical mid-season, seedy

PI 539628  Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange
donor id: CRC 3864.  origin: UNKNOWN.  cultivar: Pera.  
pedigree: Open pollinated seedling.  local name: Pera
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

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

PI 539632 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange

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

PI 539635 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange

PI 539636 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange

PI 539637 Citrus sinensis (L.) Osbeck RUTACEAE Sweet orange
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
  local name: Ambersweet.
  Tree. Cultivar. Cutting.
PI 539649  Citrus sinensis (L.) Osbeck  RUTACEAE Sweet orange

PI 539650  Citrus sinensis (L.) Osbeck  RUTACEAE Sweet orange

PI 539651  Citrus sinensis (L.) Osbeck  RUTACEAE Sweet orange

PI 539652  Citrus sinensis (L.) Osbeck  RUTACEAE Valencia orange

PI 539653  Citrus sinensis (L.) Osbeck  RUTACEAE Valencia orange

PI 539654  Citrus sinensis (L.) Osbeck  RUTACEAE Valencia orange

PI 539655  Citrus sinensis (L.) Osbeck  RUTACEAE Valencia orange

PI 539656  Citrus sinensis (L.) Osbeck  RUTACEAE Valencia orange
PI 539657  Citrus sinensis (L.) Osbeck  RUTACEAE Valencia orange
donor id: CRC 2776.  origin: UNKNOWN.  cultivar: Seedless
Valencia.  remarks: Exocortis removed by shoot tip

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.

PI 539660  Citrus sinensis (L.) Osbeck  RUTACEAE Valencia orange

PI 539661  Citrus sinensis (L.) Osbeck  RUTACEAE Valencia orange
donor id: CRC 3032.  origin: UNKNOWN.  cultivar: Campbell.

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
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 raf, 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

PI 539673 Citrus sp. RUTACEAE

PI 539674 Citrus sp. RUTACEAE Papeda

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

PI 539679 Citrus tachibana (Makino) T. Tanaka RUTACEAE Mandarin
PI 539680  Citrus taiwanica T. Tanaka & Shimada  RUTACEAE Sour orange  

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  

PI 539683  Citrus tangerina hort. ex T. Tanaka  RUTACEAE Mandarin  

PI 539684  Citrus tardiva hort. ex Shirai  RUTACEAE Mandarin  

PI 539685  Citrus temple hort. ex Yuich. Tanaka  RUTACEAE Tangor  

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
pedigree: C. paradisi (unknown cultivar) x C. tangerina. local name: Kalpi.
remarks: Probably monembryonic. See The Citrus Industry, Vol 1, pp 393-394. Flavor not good. received
as: Citrus micrantha var. microcarpa. Tree. Seed.

PI 539696  Citrus x tangelo J. Ingram & H. Moore  RUTACEAE Tangelo
pedigree: C. paradisi (unknown cultivar) x C. x tangelo 'Sampson'. local name: Pink tangelo.

PI 539697  Citrus x tangelo J. Ingram & H. Moore  RUTACEAE Tangelo
pedigree: C. paradisi (unknown cultivar) x C. tangerina.

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.

PI 539699  Citrus x tangelo J. Ingram & H. Moore  RUTACEAE Tangelo
pedigree: C. paradisi x C. reticulata (unknown cultivars)

PI 539700  Citrus x tangelo J. Ingram & H. Moore  RUTACEAE Tangelo
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
pedigree: C. paradisi x C. reticulata (unknown cultivars). remarks: Small to medium orange fruit, sour,
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.  

PI 539704  Citrus x tangelo J. Ingram & H. Moore  RUTACEAE Tangelo  
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  

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  

PI 539710  
*Citrus x tangelo* J. Ingram & H. Moore  
**RUTACEAE**  
Tangelo  

PI 539711  
*Citrus x tangelo* J. Ingram & H. Moore  
**RUTACEAE**  
Tangelo  

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, styeal 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 yukyo* hort. ex T. Tanaka  
**RUTACEAE**  
Papeda hybrid  

PI 539714  
*Clausena anisata* (Willd.) Hook. f. ex Benth.  
**RUTACEAE**  
Citrus relative  

PI 539715  
*Clausena excavata* Burm. f.  
**RUTACEAE**  
Citrus relative  
PI 539716 Clausena lansium (Lour.) Skeels RUTACEAE Citrus relative

PI 539717 Eremocitrus glauca (Lindley) Swingle RUTACEAE Citrus relative

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

PI 539720 Feroniella oblata Swingle RUTACEAE Citrus relative

PI 539721 Fortunella crassifolia Swingle RUTACEAE Kumquat

PI 539722 Fortunella crassifolia Swingle RUTACEAE Kumquat

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
PI 539725  Fortunella hybrid  RUTACEAE Kumquat hybrid

PI 539726  Fortunella hybrid  RUTACEAE Kumquat hybrid
donor id: CRC 3759. origin: UNKNOWN. pedigree: C.
reticulata 'Dancy' x Fortunella margarita 'Nagami'.

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
Tree. Cultivar. Cutting.

PI 539729  Fortunella margarita (Lour.) Swingle  RUTACEAE Kumquat
local name: Nagami kumquat. remarks: See The Citrus

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

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.

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.
Cutting.

PI 539738 Microcitrus australis (Planchon) Swingle RUTACEAE
Microcitrus
donor id: CRC 3667. origin: UNKNOWN. pedigree: PI
306118 selection. local name: Australian round lime.

PI 539739 Microcitrus australis (Planchon) Swingle RUTACEAE
Microcitrus
donor id: CRC 3668. origin: UNKNOWN. pedigree: PI
306118 selection. local name: Australian round lime.

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,
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  
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  
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  

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  

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. Cutting.

PI 539751  Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate
  local name: Pomeroy trifoliate. Tree. Cultivar.

PI 539752  Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate
  donor id: CRC 2252. origin: UNKNOWN. cultivar: Webber-Fawcett #22.

PI 539753  Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate
  donor id: CRC 2254. origin: UNKNOWN. cultivar: Barnes.

PI 539754  Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate

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.

PI 539756  Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate
  pedigree: Open pollinated seedling. remarks: Large-flowered trifoliate.

PI 539757  Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate

PI 539758  Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate
  donor id: CRC 3207. origin: UNKNOWN. cultivar: Towne "G".

PI 539759  Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate

PI 539760  Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate
  remarks: From Kryder grove, Claremont, California.
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,

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

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

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

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

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

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.

PI 539771 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate

PI 539772 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate

PI 539773 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate

PI 539774 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate

PI 539775 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate

PI 539776 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate

PI 539777 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate

PI 539778 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate

PI 539779 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate
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. Cutting.

PI 539782 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate
  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.

PI 539787 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate

PI 539788 Poncirus trifoliata (L.) Raf. RUTACEAE Trifoliate
  donor id: CRC 3876. origin: UNKNOWN. cultivar: English
  Dwarf. pedigree: Open pollinated seedling. local name:

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
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

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

PI 539801 X Citremocitrus sp. RUTACEAE Citrus relative

PI 539802 X Citrofortunella sp. RUTACEAE Kumquat hybrid

PI 539803 X Citrofortunella sp. RUTACEAE Kumquat hybrid

PI 539804 X Citrofortunella sp. RUTACEAE Kumquat hybrid

PI 539805 X Citrofortunella sp. RUTACEAE Kumquat hybrid

PI 539806 X Citrofortunella sp. RUTACEAE Kumquat hybrid
PI 539807  X Citrofortunella sp.  RUTACEAE Kumquat hybrid  

PI 539808  X Citromicrocitrus sp.  RUTACEAE Microcitrus hybrid  

PI 539809  X Citroncirus sp.  RUTACEAE Citrange  

PI 539810  X Citroncirus sp.  RUTACEAE Citrange  

PI 539811  X Citroncirus sp.  RUTACEAE Citrange  

PI 539812  X Citroncirus sp.  RUTACEAE Citrange  

PI 539813  X Citroncirus sp.  RUTACEAE Citrange  

PI 539814  X Citroncirus sp.  RUTACEAE Citrange  
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 cultivar).  **Tree.**  **Cutting.**

PI 539818  X Citroncirus sp.  RUTACEAE Citrange  
**donor id:** CRC 3881.  **origin:** UNKNOWN.  **pedigree:** Poncirus trifoliata x 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.
Cutting.

PI 539824  X Citroncirus sp.  RUTACEAE Citrumelo

PI 539825  X Citroncirus sp.  RUTACEAE Citrumelo

PI 539826  X Citroncirus sp.  RUTACEAE Citrumelo

PI 539827  X Citroncirus sp.  RUTACEAE Citrumelo

PI 539828  X Citroncirus sp.  RUTACEAE Citrumelo

PI 539829  X Citroncirus sp.  RUTACEAE Citrumelo

PI 539830  X Citroncirus sp.  RUTACEAE Citrumelo
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
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

PI 539834 X Citroncirus sp. RUTACEAE Trifoliate hybrid
donor id: CRC 1437. origin: UNKNOWN. cultivar:
Citradia. pedigree: P. trifoliata x C. aurantium

PI 539835 X Citroncirus sp. RUTACEAE Trifoliate hybrid
donor id: CRC 1438. origin: UNKNOWN. cultivar:
Citradia. pedigree: P. trifoliata x C. aurantium

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

PI 539838 X Citroncirus sp. RUTACEAE Trifoliate hybrid
donor id: CRC 1449. origin: UNKNOWN. cultivar:
Citremon. pedigree: P. trifoliata x C. limon (unknown
Cutting.

PI 539839 X Citroncirus sp. RUTACEAE Trifoliate hybrid
donor id: CRC 2618. origin: UNKNOWN. cultivar:
Citrandarin. pedigree: P. trifoliata x C. reticulata
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; 

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 

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, 

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 

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, 

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
pedigree: C. reshni 'Cleopatra' x Poncirus trifoliata.
remarks: Becoming more popular in South Africa where
salinity is problem. Reported to be similar to Troyer
citrang but slightly slower growth; less vigorous growth
in nursery than citranges; comparable to Swingle
citrumelo; slightly susceptible to Phytophthora

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
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
Citroncirus 'Rusk' Open pollinated seedling. remarks:
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 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 NIE 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


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.


PI 539861. Glycine max (L.) Merr. FABACEAE Soybean


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.


PI 539863. Glycine max (L.) Merr. FABACEAE Soybean


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


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.


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.

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. **group:** 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.  
**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.  

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.  
**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.  
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:** GOL DAR. **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 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 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 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 (48 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 539881 to 539914-continued


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.

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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 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*2/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.  
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.  
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.  
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.

PI 539904  
origin: United States.  origin institute: Agricultural Research Service -- USDA, P.O. Box 5677, Fargo, North Dakota 58105.  
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**: cms\(H.\) debilis ssp. silvestris (Acc 367) F3 (39 pl.) bulk.  **other id**: GP-144.  **group**: CSR-SUNFLOWER.  **remarks**: Plants multiple branches and heads, height 90 cm. Flowering (50%) 58 days after planting. Self-compatibility (seed set under bags) 38%. Viable pollen staining 80%. 100 seed weight 3.6 g. 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 110 cm. Flowering (50%) 56 days after planting. Self-compatibility (seed set under bags) 20%. Viable pollen staining 94%. 100 seed weight 8.7 g. 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 110 cm. Flowering (50%) 60 days after planting. Self-compatibility (seed set under bags) 32%. Viable pollen staining 68%. 100 seed weight 6.1 g. 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**: cms\(H.\) deserticola (ACC 1474)//RHA 274 F4 Sibbed two generations.  **remarks**: Plants multiple branches and heads, height 110 cm. Flowering (50%) 57 days after planting. Self-compatibility (seed set under bags) 35%. Viable pollen staining 85%. 100 seed weight 2.0 g. Test weight 435 kg/m³. Oil content 44.0%. Water stress tolerance. Spring Annual. Breeding Material. Seed.
PI 539881 to 539914—continued


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 539917. Hordeum vulgare L.  POACEAE  Barley

Donated by: Busch Agricultural Resources Inc., United States. Received April 16, 1990.


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

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

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.  
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 539930. Zea mays L. subsp. mays POACEAE Corn


PI 539931. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: D.J. Van der Have B.V., United States. Received April 16, 1990.


PI 539932. Brassica oleracea L. BRASSICACEAE Cauliflower


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.

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.


PI 539935. Brassica chinensis L. BRASSICACEAE Pak-choi

Donated by: Alf Christianson Seed Co., United States. Received April 16, 1990.


PI 539936. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Asgrow Seed Co., United States. Received April 16, 1990.


PI 539937. Lactuca sativa L. ASTERACEAE Lettuce


PI 539938. Gossypium hirsutum L. MALVACEAE Cotton

Donated by: Ellis Brothers Seed, Inc., United States. Received April 16, 1990.
PI 539938-continued


PI 539939. Lactuca sativa L. ASTERACEAE Lettuce

Donated by: Vilmorin S.A., United States. Received April 16, 1990.


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 to 540252-continued


PI 540113  
donor id: 4260.  
origin: Yemen Arab Republic.  
locality: Al Bayda Al Sharbah.  
elevation: 2070m.  

PI 540114  
donor id: 4266.  
origin: Yemen Arab Republic.  
locality: Al Bayda.  
elevation: 2010m.  

PI 540115  
donor id: 4269.  
origin: Yemen Arab Republic.  
locality: Al Bayda Thenaem.  
elevation: 1990m.  

PI 540116  
donor id: 4272.  
origin: Yemen Arab Republic.  
locality: Al Bayda Thenaem.  
elevation: 1990m.  

PI 540117  
donor id: 4283.  
origin: Yemen Arab Republic.  
locality: Al Bayda Thenaem.  
elevation: 1940m.  

PI 540118  
donor id: 4284.  
origin: Yemen Arab Republic.  
locality: Al Bayda Thenaem.  
elevation: 1940m.  

PI 540119  
donor id: 4291.  
origin: Yemen Arab Republic.  
locality: Al Bayda Thenaem.  
elevation: 1940m.  

PI 540120  
donor id: 4294.  
origin: Yemen Arab Republic.  
locality: Al Bayda Thenaem.  
elevation: 1940m.  

PI 540121  
donor id: 4295.  
origin: Yemen Arab Republic.  
locality: Al Bayda Thenaem.  
elevation: 1940m.  

PI 540122  
donor id: 4296.  
origin: Yemen Arab Republic.  
locality: Al Bayda Thenaem.  
elevation: 1940m.  
PI 539940 to 540252-continued


PI 540242  

PI 540243  

PI 540244  

PI 540245  

PI 540246  

PI 540247  

PI 540248  

PI 540249  

PI 540250  

PI 540251  

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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.


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 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 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.  

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**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.  

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**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.  

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**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-E1.  
**other id:** GP-430.  
**source:** Crop Sci. 30(6):1373 1990.  
**group:** CSR-COTTON.  
PI 540257 to 540263-continued

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.  

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.  


PI 540264 to 540273-continued

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.  
**source**: Crop Sci. 30(6):1373 1990.  **group**: CSR-COTTON.  

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.  
**group**: CSR-COTTON.  

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.  
**group**: CSR-COTTON.  

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.  

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


PI 540276


PI 540277

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.  
**group**: CSR-COTTON.  
**remarks**: 
Compact plant type. Maturity medium. Bolls small. 
Elevated levels of condensed tannins in mature leaves. 

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.  
**group**: CSR-COTTON.  
**remarks**: 
Plants tall. Maturity medium. Bolls medium to large. 
Elevated levels of condensed tannins in mature leaves. 

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.  
**group**: CSR-COTTON.  
**remarks**: 
Plants tall. Maturity medium. Bolls medium to large. 
Elevated levels of condensed tannins in mature leaves. 

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.  
**group**: CSR-COTTON.  
**remarks**: 
Plants tall. Maturity medium. Bolls medium to large. 
Elevated levels of condensed tannins in mature leaves. 
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.  

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.  

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.  

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.  

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.  

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.  

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

PI 540291

PI 540292

PI 540293

PI 540294


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 #1055/2/Empire glandless. **other id:** GP-467. **source:** Crop Sci. 30(6):1374 1990.  

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.  

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.  
PI 540303

PI 540304

PI 540305

PI 540306

PI 540307
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.  

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.  

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.  

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 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.


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 540315 donor id: 82. 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

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 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.


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 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 540347 | origin: German Democratic Repub. other id: 504-85-76. Cultivated. Bulbs. |
PI 540331 to 540356-continued

PI 540356  
**origin:** USSR.  **collected:** 1983.  **other id:** K6017-85-76.  
**locality:** Verchnjaja Mcura, 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 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 to 540374-continued


PI 540375 to 540377. Allium sativum L. var. sativum LILIACEAE

Donated by: Coon, L., Paul, Idaho, United States. Received March 02, 1990.


PI 540378. Allium sativum L. var. sativum LILIACEAE

Donated by: Swenson, J., 245 Hawthorne Ave., Glencoe, Illinois, United States. Received March 02, 1990.


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.

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.

   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 erosion 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.


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, Beltsville, Maryland. Received January 16, 1990.
PI 540383-continued


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 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 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


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 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 540399. Avena sativa L. POACEAE Common oat


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.


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.

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<tr>
<td>donor id: U026.</td>
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<tr>
<td>collector id: U026.</td>
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<tr>
<td>latitude: 58 deg. 20 min. N.</td>
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<tr>
<td>Annual. Cultivar. Seed.</td>
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<th>PI 540403</th>
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<tbody>
<tr>
<td>donor id: U035.</td>
</tr>
<tr>
<td>local name: Black &amp; White melon.</td>
</tr>
<tr>
<td>collector id: U035.</td>
</tr>
<tr>
<td>latitude: 67 deg. 00 min. N.</td>
</tr>
<tr>
<td>Annual. Cultivar. Seed.</td>
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<th>PI 540404</th>
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<tbody>
<tr>
<td>donor id: U036.</td>
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<tr>
<td>local name: Yellowskin.</td>
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<tr>
<td>collector id: U036.</td>
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<tr>
<td>latitude: 67 deg. 00 min. N.</td>
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<tr>
<td>Annual. Cultivar. Seed.</td>
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<th>PI 540405</th>
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<tr>
<td>donor id: U048.</td>
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<td>locality: Samarkand, Uzbek.</td>
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<th>PI 540406</th>
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<tr>
<td>donor id: U049.</td>
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<td>locality: Samarkand, Uzbek.</td>
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<tr>
<td>donor id: U050.</td>
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<td>locality: Samarkand, Uzbek.</td>
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<th>PI 540408</th>
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<tr>
<td>donor id: U051.</td>
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<tr>
<td>locality: Samarkand, Uzbek.</td>
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</tbody>
</table>


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.


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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.

**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 540423. Beckmannia syzigachne (Steud.) Fern. POACEAE American sloughgrass


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 pollinated. 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 revegetation 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.


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.


PI 540427 to 540428. Dactylis glomerata L. POACEAE Orchardgrass

Donated by: Rumbaugh, M.D.; Johnson, D.A., Forage and Range Research, USDA-ARS, Logan, Utah, United States. Received October 14, 1986.
PI 540427 to 540428-continued


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.


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 540432. Pennisetum lanatum Klotzsch POACEAE

Donated by: Rumbaugh, M.D.; Johnson, D.A., Forage and Range Research, USDA-ARS, Logan, Utah, United States. Received October 14, 1986.
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 1m. 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

**Donated by:** Rumbaugh, M.D.; Johnson, D.A., Forage and Range Research, USDA-ARS, Logan, Utah, United States. Received October 14, 1986.
PI 540436-continued


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.


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 540440. Trigonella gracilis Benth. FABACEAE

Donated by: Rumbaugh, M.D.; Johnson, D.A., Forage and Range Research, USDA-ARS, Logan, Utah, United States. Received October 14, 1986.
PI 540440-continued


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.


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.


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, lodging, 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.


PI 540449 to 540450. Medicago sativa L. FABACEAE Alfalfa

Donated by: Pioneer Hi-Bred International, United States. Received April 30, 1990.


PI 540451. Glycine max (L.) Merr. FABACEAE Soybean


PI 540452 to 540456. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Asgrow Seed Co., United States. Received April 30, 1990.


PI 540457. Brassica napus L. BRASSICACEAE Rape


PI 540458. Brassica napus L. BRASSICACEAE Rape

PI 540458-continued

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.

cultivar: PRONTO. other id: PVP 9000095. source: Pending. group: PVPO. Cultivar. Seed.

PI 540460. Arachis hypogaea L. FABACEAE Peanut


PI 540461. Arachis hypogaea L. FABACEAE Peanut

PI 540461-continued

Cultivar. Seed.

PI 540462 to 540466. Zea mays L. subsp. mays POACEAE Dent corn


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.

533
PI 540464  
**origin:** United States.  
**origin institute:** Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701.  
**cultivar:** ARK. CORN-BORER COMPOSITE #1.  
**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 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 540482  origin: China.  **cultivar:** P8217.  **pedigree:** P12/RH 77-8.  Cultivar.  Seed.
PI 540467 to 540487-continued


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 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 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 540524 origin: South Africa. cultivar: SA413. other id: 86-64. 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**: SA1110.  **other id**: 86-87.  
Cultivar.  Seed.
PI 540516 to 540549-continued


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.


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.


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


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.


PI 540554. Glycine max (L.) Merr. FABACEAE Soybean

PI 540554-continued

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.

PI 540555. Glycine max (L.) Merr. FABACEAE Soybean

remarks: Hamilton Soybean. Received May 07, 1990.

pedigree: Sprite x L75-3632 L75-3632 is a selection from Corsoy (6) x Lee 68 and is a sister line to Corsoy 79.

PI 540556. Glycine max (L.) Merr. FABACEAE Soybean

remarks: Jack Soybean. Received May 07, 1990.

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 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:** 1m.  **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:** 1m.  **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:** 1m.  **remarks:** Plants variable, sparsely scattered, most erect, one procumbent. Population of 25. Twenty 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 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 540560 to 540702-continued


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 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: 1m. 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: 1m.  remarks: Plants variable, large, seed good, population of more than 500. Forty-four 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: 1m.  remarks: Plants variable, some very large, poor seed set. one with monogerm, population of 100. Twenty-six 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: 1 m. remarks: Plants single type, very large, mostly green, population of 30. Fourteen 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 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: 1 deg. 38 min. E. elevation: 2m. remarks: Plants single type, population of 50. Fifteen 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: 1m. remarks: Plants variable, large, separated beets, segregating pigmentation. Population of more than 100. Twenty-one 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: 1m. 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: 1m. 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 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 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


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 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 Choisy 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


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


PI 540713


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.

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 to 540730-continued


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 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.

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PI 540715 to 540730-continued


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 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 540733. *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 chromosome no. of all other *cucurbita* species. Possesses underground tuber. Perennial. Wild. Seed.

PI 540734. *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 540735. *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.

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

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

pedigree: TZPB Eps (Tuxpeno). remarks: Plant maturity
Adapted to tropics. Resistant to maize streak virus
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 540759  origin: United States.  *cultivar*: INDIAN FLINT GRAVES.  

PI 540760  origin: United States.  *cultivar*: WHITE VARIETY BRITTAIN.  

PI 540761  origin: United States.  *cultivar*: SHEPPARD CORN.  
*locality*: Vidalia.  

PI 540762  origin: United States.  *cultivar*: NESBITT YELLOW.  

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.  

PI 540765  origin: United States.  *cultivar*: WATTS SPECIAL YELLOW.  
*locality*: Maysville.  

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 540767  
**Origin:** United States. **Cultivar:** CHRISTMAS CORN.  

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 1066.1kg 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 2571.1kg 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 

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 

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. 

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, 
1.1. Grain mixed. Yield 3066.5kg per hectare. Spring 

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 

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 
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

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

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

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

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.


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.

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.
PI 540793 to 540802—continued

PI 540797  
**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), 107 cm in height. Plant color purple, red epicarp color, thin mesocarp, and normal endosperm. Spring Annual. Breeding Material. Seed.

PI 540798  
**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), 104 cm 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  
**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), 104 cm in height. Plant color purple, white epicarp color, thin mesocarp, and normal endosperm. Spring Annual. Breeding Material. Seed.

PI 540800  
**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), 102 cm 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.  
cultivar: Tx2870.  
pedigree: 
((TAM2566*(BTx3197*SC170))*Tx2767).  
other id: GP-327.  
group: CSR-SORGHUM.  

PI 540805  
origin: United States.  
cultivar: Tx2871.  
pedigree: 
((TAM2566*(BTx3197*SC170))*Tx2767).  
other id: GP-328.  
group: CSR-SORGHUM.  

PI 540806  
origin: United States.  
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), 114cm 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.  
cultivar: Tx2873.  
pedigree: 
((Tx430*(((RY8*Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-4-4) * Tx2767).  
other id: GP-330.  
group: CSR-SORGHUM.  
PI 540808

cultivar: Tx2874. pedigree:
((Tx430*(((RY8*Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-4-4) * Tx2767. other id: GP-331. group: CSR-SORGHUM.

PI 540809

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), 112cm 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

cultivar: Tx2876. pedigree:
((Tx430*(((RY8*Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-8-24) * Tx2766). other id: GP-333. group: CSR-SORGHUM.

PI 540811

cultivar: Tx2877. pedigree:
((Tx430*(((RY8*Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-8-24) * Tx2766). other id: GP-334. group: CSR-SORGHUM.
PI 540812  
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  
cultivar: Tx2879.  pedigree: 
((Tx430*(((RY8*Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-8-24 )* Tx2766).  other id: GP-336.  group: CSR-SORGHUM.  

PI 540814  
cultivar: Tx2880.  pedigree: 
((Tx430*(((RY8*Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-8-24 )* Tx2766).  other id: GP-337.  group: CSR-SORGHUM.  

PI 540815  
cultivar: Tx2881.  pedigree: 
((Tx430*(((RY8*Tx2536)*(SC110-9*SC599-6))*SC175-9)-12-4-3-3 )*Tx2766).  other id: GP-338.  group: CSR-SORGHUM.  
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 

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 

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), 119cm in height.  Plant color reddish-purple, 
red epicarp color, thin mesocarp, and normal endosperm. 
Resistant to rust caused by Puccinia purpurea.  Spring 

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.  
cultivar: Tx2886.  
pedigree: 
((Tx430*(((RY8*Tx2536)*(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.  
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.  
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.  

PI 540823  
origin: United States.  
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 540825 to 540836. Arachis hypogaea L.  FABACEAE  Peanut


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, rough 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 540837 to 540857. Arachis hypogaea subsp. fastigiata Waldron
FABACEAE  Peanut


PI 540840  donor id: 738-1.  origin: Bolivia.  local name: Mani.  
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.  
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.  
locality: Rurrenabaque, Beni Department, Ballivian Province.  
latitude: 14 deg. 30 min. S.  longitude: 67 deg. 30 min. W.  
elevation: 268m.  remarks: Seeds tan.  
Seed.

locality: Rurrenabaque, Beni Department, Ballivian Province.  
latitude: 14 deg. 30 min. S.  longitude: 67 deg. 30 min. W.  
elevation: 268m.  remarks: Seeds red.  
Seed.

PI 540844  donor id: 746-1.  origin: Bolivia.  local name: Mani rojo (Spanish) Janide derena" (Tacana).  
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.  
Seed.


PI 540850  
donor id: 766-1.  
origin: Bolivia.  
local name: Mani amarillo (Spanish), Quillu mani (Quechua) Janide tirina (Tacana).  
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.  

PI 540851  
donor id: 766-2.  
origin: Bolivia.  
local name: Mani amarillo (Spanish), Quillu mani (Quechua) Janide tirina (Tacana).  
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.  

PI 540852  
donor id: 790-1.  
origin: Bolivia.  
local name: Mani blanco (Spanish) Yura mani (Quechua).  
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.  

PI 540853  
donor id: 790-2.  
origin: Bolivia.  
local name: Mani blanco (Spanish) Yura mani (Quechua).  
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.  
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.  

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.  

PI 540856  
**donor id:** 798-2.  
**origin:** Bolivia.  
**local name:** Mani blanco (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.  

PI 540857  
**donor id:** 851.  
**origin:** Bolivia.  
**local name:** Mani colorado.  
**collected:** November 19, 1988.  
**collector id:** 851.  
**locality:** Portachuele Bajo, Esse Eija Indian village about 50km (air) SSW of Riberalta on Rio Beni, Pando Department, Madre de Dios Province.  
**latitude:** 11 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 540868 to 540871. Arachis sp. FABACEAE


PI 540870  
donor id: 860.  
origin: Bolivia.  
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).  
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. Numerous crown buds in fall. Flower color approx. 100% purple with traces of variegated and cream. Resilience 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


**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


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 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: PVFO. 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 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 NB1. Each of eight types of NB1 (2x + 1) was pollinated by NB1(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 NB1. 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

PI 540894-continued

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.


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 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 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.


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 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-

**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 from controlled pollinations.  
Bottle gourd #1.  
Cultivated.  
Seed.
<table>
<thead>
<tr>
<th>PI 540908 to 540917-continued</th>
</tr>
</thead>
</table>
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.

PI 540919 donor id: 142. origin: UNKNOWN. collector id: 142.

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.

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 amygdaliformis 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.  

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.


PI 540926 to 540933. 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 April 08, 1983.

PI 540926  

PI 540927  
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 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 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.


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.

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.


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 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.

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 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 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.  

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.  

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.  

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.  

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.  

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.  
local name: Rootstock Pear.  

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.  
local name: Rootstock Pear.  

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.  
local name: Rootstock Pear.  
PI 540992  
**origin:** United States.  
**origin institute:** Oregon State University, Experiment Station, Talent, Oregon.  
**cultivar:** OSU-1.  

PI 540993  
**origin:** China.  
**developer country:** United States.  
**origin institute:** Oregon State University, Experiment Station, Talent, Oregon.  
**cultivar:** OSU-3.  

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, NCG-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 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 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 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 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.


PI 541016.  Pyrus calleryana Decne.  ROSACEAE  Callery Pear


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 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.


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.


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 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 541071  
origin: Asia.  
developer country: United States.  
origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon.  

PI 541072  
origin: United States.  
origin institute: Oregon State University, Exp. Station, Crown Point Orchard, Medford, Oregon.  
cultivar: OPR 177.  
pedigree: Seedling selection.  

PI 541073  
origin: Asia.  
developer country: United States.  
origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon.  
pedigree: Seedling selection from Asian seedlot.  

PI 541074  
origin: United States.  
origin institute: Oregon State University, Exp. Station, Crown Point Orchard, Medford, Oregon.  
cultivar: OPR 191.  
pedigree: Seedling selection.  

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.  

PI 541076  
origin: United States.  
origin institute: Oregon State University, Exp. Station, Crown Point Orchard, Medford, Oregon.  
cultivar: OPR 195.  
pedigree: Seedling selection.  

PI 541077  
origin: United States.  
pedigree: Seedling selection.  

PI 541078  
origin: United States.  
origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon.  

PI 541079  
origin: United States.  
origin institute: Oregon State University, Exp. Station, Crown Point Orchard, Medford, Oregon.  
cultivar: OPR 132.  
pedigree: Seedling selection.  
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.


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.


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 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


PI 541086. Pyrus calleryana Decne. ROSACEAE Callery Pear

Donated by: Makino, Takahiro, Shizuoka Agricultural Experiment Station, Iwate Shizuoka, Japan. remarks: Pyrus accessions at NCGR-Corvallis being numbered. Received January 08, 1987.


PI 541087. Pyrus calleryana Decne. ROSACEAE Callery Pear


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.


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.  

PI 541098  
origin: United States.  
origin institute: Oregon State University, Experiment Station, Crown Point Orchard, Medford, Oregon.  
cultivar: OPR 220.  
pedigree: Unknown.  

PI 541099  
origin: United States.  
origin institute: Oregon State University, Experiment Station, Crown Point Orchard, Medford, Oregon.  
cultivar: OPR 233.  
pedigree: Unknown.  

PI 541100  
origin: United States.  
origin institute: Oregon State University, Experiment Station, Crown Point Orchard, Medford, Oregon.  
cultivar: OPR 201.  
pedigree: Unknown.  

PI 541101  
origin: United States.  
origin institute: Oregon State University, Experiment Station, Crown Point Orchard, Medford, Oregon.  
cultivar: OPR 211.  
pedigree: Unknown.  

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.  

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.  

PI 541104  
origin: United States.  
cultivar: Redspire.  
pedigree: Seedling selection from cultivar Bradford.  
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, 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:** Oregon State University, Experiment Station, Talent, Oregon.  
**cultivar:** OSU-9.  

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


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.


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.


Cultivar. Plant.

PI 541121 origin: United States. 


PI 541123 origin: United States. developer country: United Kingdom. 
cultivar: Barland. pedigree: Chance seedling. 

PI 541124 origin: United States. developer country: United Kingdom. 
cultivar: Barnet. pedigree: Unknown. 


PI 541126 origin: United States. developer country: France. 

PI 541127 origin: United States. developer country: Asia Minor. 

PI 541128 origin: United States. 

PI 541129 origin: United States. developer country: France. 


origin institute: Dept. Loire et Cher, Oregon. 
PI 541133
origin: United States. 
developer country: France. 
cultivar: Beurre Clairgeau. 

PI 541134
origin: United States. 
developer country: France. 
cultivar: Beurre d'Amanlis. 

PI 541135
origin: United States. 
developer country: France. 
cultivar: Beurre d'Amanlis Panachee. 

PI 541136
origin: United States. 
developer country: United Kingdom. 
cultivar: Beurre d'Angleterre. 

PI 541137
origin: United States. 
developer country: France. 

PI 541138
origin: United States. 
developer country: Belgium. 

PI 541139
origin: United States. 
developer country: France. 
cultivar: Beurre de Nantes. 

PI 541140
origin: United States. 
developer country: France. 
cultivar: Beurre de Saint Nicolas. 

PI 541141
origin: United States. 
developer country: Belgium. 
cultivar: Beurre Diel. 

PI 541142
origin: United States. 
developer country: Belgium. 
cultivar: Beurre Dumont. 

PI 541143
origin: United States. 
developer country: France. 

PI 541144
origin: United States. 
developer country: France. 
cultivar: Beurre Giffard. 

PI 541145
origin: United States. 
developer country: France. 
cultivar: Beurre Gris. 
cultivar: Beurre Gris d'Hiver Nouveau.  pedigree:  


PI 541149  origin: United States.  developer country: Belgium.  
cultivar: Beurre Phillipppe Delfosse.  pedigree: Chance  

cultivar: Beurre Superfin.  pedigree: Chance seedling.  

PI 541151  origin: United States.  developer country: United  
Kingdom.  cultivar: Blakeney Red.  local name: Perry  

Plant.

cultivar: Buffum.  pedigree: Possibly a seedling of  


PI 541155  origin: United States.  developer country: Belgium.  

PI 541156  origin: United States.  developer country: United  
Kingdom.  cultivar: Butt.  local name: Perry Pear.  

origin institute: University of California, Davis,  
California.  cultivar: California.  pedigree: Max-Red  

PI 541158  origin: United States.  origin institute: Oregon State  
University, Agricultural Experiment Station, Medford,  
Oregon.  cultivar: Canal Pear.  pedigree: Forelle x Max  
PI 541159  Pyrus hybrid  ROSACEAE Pear

PI 541160  Pyrus hybrid  ROSACEAE Pear


PI 541182  
**origin**: United States. **developer country**: France.  
**cultivar**: Duchesse de Mouchy. **pedigree**: Chance seedling.  

PI 541183  
**origin**: United States. **developer country**: United States.  
**cultivar**: Early Harvest. **pedigree**: Chance seedling.  

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.  

PI 541185  
**origin**: United States. **developer country**: Belgium.  
**cultivar**: Elizabeth. **pedigree**: Seedling selection.  

PI 541186  
**origin**: United States. **developer country**: Canada.  
**origin institute**: Canada Experimental Farms, Oregon.  
**cultivar**: Eva Baltet. **pedigree**: Bartlett x Flemish Beauty.  

PI 541187  
**origin**: United States. **developer country**: United States.  

PI 541188  

PI 541189  
**origin**: United States. **developer country**: Belgium.  
**cultivar**: Flemish Beauty. **pedigree**: Chance seedling.  

PI 541190  
**origin**: United States. **developer country**: France.  
**cultivar**: Fondante de Moulins Lille. **pedigree**: Seedling of cultivar Napoleon.  

PI 541191  
**origin**: United States. **developer country**: Germany.  

PI 541192  
**origin**: United States. **developer country**: United States.  
**cultivar**: Frederick Clapp. **pedigree**: Urbaniste x Beurre Superfin.  

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.  

PI 541195 origin: United States. developer country: United 
Kingdom. cultivar: Gin. local name: Perry Pear. 

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. 

cultivar: Grosse Louise. pedigree: Chance seedling. 

PI 541199 origin: United States. developer country: Denmark. 

PI 541200 origin: Canada. origin institute: Agriculture Canada, 
Experiment Station, Harrow, Ontario. cultivar: H 6831/1.12. 

PI 541201 origin: Canada. origin institute: Agriculture Canada, 
Experiment Station, Vineland, Ontario. cultivar: H.E.S. 

PI 541202 origin: Canada. origin institute: Agriculture Canada, 
Experiment Station, Harrow, Ontario. cultivar: HW 601. 
pedigree: Bartlett x Maxine second test selection. 

PI 541203 origin: United States. developer country: Canada. 
origin institute: Agriculture Canada, Research Station, 
Harrow, Ontario. cultivar: Harvest Queen. pedigree: 

PI 541204 origin: United States. developer country: Germany. 

PI 541205 origin: United States. developer country: United 
Kingdom. cultivar: Hendre Huffcap. local name: Perry 
PI 541114 to 541298-continued


origin institute: Cornell University, Agricultural Experiment Station, Geneva, New York. 

origin institute: University of Tennessee, Agricultural Experiment Station, Knoxville, Tennessee. 


PI 541214 origin: United States. developer country: Europe. 

PI 541215 origin: United States. developer country: USSR. 


PI 541218  
origin: United States.  developer country: Europe.  
Cultivar.  Plant.

PI 541219  

PI 541220  
cultivar: Louise Bonne de Jersey.  pedigree: Seedling 

PI 541221  
cultivar: Louise Vilmorin.  pedigree: Seedling of cultivar 

PI 541222  
origin: United States.  origin institute: Oregon State 
University, Experiment Station, Medford, Oregon.  

PI 541223  
cultivar: Lucy Duke.  pedigree: Bartlett x (Winter 

PI 541224  
cultivar: Madame Andre Leroy.  pedigree: Seedling 

PI 541225  

PI 541226  

PI 541227  
cultivar: Madame Treyve.  pedigree: Seedling selection.  

PI 541228  
Cultivar.  Plant.

PI 541229  
cultivar: Marguerite Marillat.  pedigree: Unknown.  

PI 541230  
origin: United States.  developer country: Belgium.  
cultivar: Marie Louise Marillat.  pedigree: Seedling 

PI 541231  
Cultivar.  Plant.
PI 541114 to 541298-continued

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 541245 origin: United States. developer country: Europe. 


origin institute: Cornell University, Agricultural Experiment Station, Geneva, New York. 

PI 541248 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. 


PI 541250 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. 


PI 541252 origin: United States. origin institute: Oregon State University, Experiment Station, Medford, Oregon. 

PI 541253 origin: United States. developer country: Germany. 

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<tr>
<th>Plant Patent</th>
<th>Origin</th>
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<th>Cultivar</th>
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<td>Rousselet de Reims</td>
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<td>Royale Vendee</td>
<td>Seedling selection</td>
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<td>Anjou</td>
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<td>Saint Andre</td>
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<td>Senator Belle</td>
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<td>Stark Jumbo</td>
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<td>PI 541267</td>
<td>United States</td>
<td>Bartlett</td>
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<td>Bartlett sport</td>
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<td>PI 541268</td>
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<td>Success de la Milleraye</td>
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PI 541114 to 541298-continued


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.  

PI 541300  
**origin**: Italy.  
**cultivar**: Spadona di Salerno.  
**pedigree**: Unknown.  

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.  

PI 541304  
**origin**: United States.  
**developer country**: France.  
**cultivar**: Belle Poitevien.  

PI 541305  
**origin**: United States.  
**developer country**: United Kingdom.  
**cultivar**: Brandy.  
**local name**: Perry Pear.  

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.  
PI 541303 to 541319-continued

PI 541307  origin: United States.  developer country: Belgium.  
cultivar: Doyenne d'Hiver.  pedigree: Unknown.  

PI 541308  origin: United States.  origin institute: Eller Pear Co., 

PI 541309  origin: United States.  developer country: United 
Kingdom.  cultivar: Fertility.  pedigree: Seedling of 

PI 541310  origin: United States.  developer country: Belgium.  
cultivar: Glou Morceau.  pedigree: Seedling selection.  

Cultivar.  Plant.

cultivar: Kalle.  pedigree: Clapp Favorite mutant.  

origin institute: D. Lawyer and Sons Nursery, Plains, 

origin institute: University of Tennessee, Agricultural 
Experiment Station, Knoxville, Tennessee.  cultivar: 
Mooers.  pedigree: Duchesse D'Angouleme x Late Faulkner.  

origin institute: USDA/ARS, Beltsville, Maryland.  
cultivar: Moonglow.  pedigree: US-Mich. 437 x Roi Charles 

PI 541316  origin: United States.  developer country: Australia.  

PI 541317  origin: United States.  developer country: United 
Kingdom.  cultivar: Red Pear.  pedigree: Unknown.  local 

PI 541318  origin: United Kingdom.  origin institute: University of 
Bristol, Long Ashton Research Station, Bristol, England.  
PI 541319 origin: Europe. developer country: United States. 

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.


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.


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.

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. 
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 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 541334  
**PI 541334**  
**origin:** United States.  
**cultivar:** Doyenne du Comice 4n.  

PI 541335  
**PI 541335**  
**origin:** United States.  
**developer country:** France.  
**origin institute:** Charteaux Monastery, Paris, West Virginia.  
**cultivar:** Doyenne Gris.  
**pedigree:** White Doyenne russet sport. Perennial. Cultivar. Plant.

PI 541336  
**PI 541336**  
**origin:** United States.  
**developer country:** France.  
**cultivar:** Duchesse d'Angouleme Bronzee.  
**pedigree:** Duchesse d'Angouleme sport. Perennial. Cultivar. Plant.

PI 541337  
**PI 541337**  
**origin:** United States.  
**developer country:** Europe.  
**cultivar:** Early Green Sugar.  
**pedigree:** Uncertain. Perennial. Cultivar. Plant.

PI 541338  
**PI 541338**  
**origin:** United States.  
**origin institute:** University of Florida, Florida.  

PI 541339  
**PI 541339**  
**origin:** Canada.  
**origin institute:** Agriculture Canada, Research Station, Harrow, Ontario.  
**cultivar:** Harrow 600.  

PI 541340  
**PI 541340**  
**origin:** United States.  
**cultivar:** Bartlett - Improved. Perennial. Cultivar. Plant.

PI 541341  
**PI 541341**  
**origin:** United States.  
**cultivar:** Jubileer D'Ar. Perennial. Cultivar. Plant.

PI 541342  
**PI 541342**  
**origin:** United States.  
**developer country:** United States.  
**cultivar:** Kyles Sugar. Perennial. Cultivar. Plant.

PI 541343  
**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  
**PI 541344**  
**origin:** United States.  
**cultivar:** Bartlett 4n - Max Red.  
**pedigree:** Bartlett bud mutation. Perennial. Cultivar. Plant.

PI 541345  
**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 541358 origin: United States.  
cultivar: Winter Nelis 4n.  

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 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.


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 to 541437-continued


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 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.  **local name:** Rootstock Pear.  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.  

PI 541437  
**origin:** Europe.  
**developer country:** United States.  
**origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.  
**pedigree:** Seedling selection from European seedlot.  

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.  

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.  

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.


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 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 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.

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 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.

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. 

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. 

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. 

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.


PI 541468 to 541469. Pyrus communis L. ROSACEAE Pear


PI 541470 to 541471. Pyrus communis L. ROSACEAE Pear


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.


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 to 541481-continued


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.


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 to 541489-continued


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.


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<td>Sheep fescue</td>
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<td>Singkwa towelgourd</td>
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<td>Smooth bromegrass</td>
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<td>Snap bean</td>
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<td>Snow buckwheat</td>
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<td>Sorghum</td>
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<td>Soybean</td>
<td>537094-537096,538024,538375-538410,538773-538774,538781,539860-539936,540451-540456,540551,540739-540740,540876-540884,538282-538354,539141</td>
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<td>Spiny amaranth</td>
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<td>Spreading red fescue</td>
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<td>Squash</td>
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Vinca: 538775-538778,540878-540879
Watermelon: 537265-537276,537299,537460-537473,538012,538888
Wheat: 536991-536995,537261-537263,538768
White clover: 539099-539101
White sweetclover: 539010-539016
Wild einkorn: 538524-538625
Wild emmer: 538626-538719
Wild soybean: 538411
Yellow sweetclover: 539017-539022
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)